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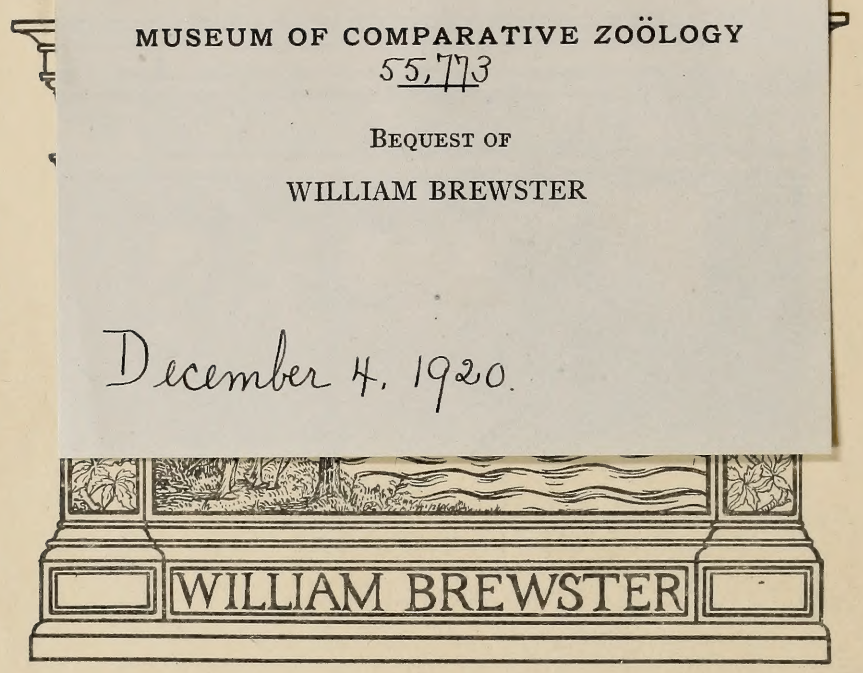

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VOLUME XVI

JANUARY TO JUNE, 1902

◆

G. O. SHIELDS (Coquina), Editor and Manager

◆

NEW YORK
23 West Twenty-fourth Street
1902

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INDEX TO VOLUME XVI.

PAGE.
That Is the Worst Cat I Ever Saw........ Frontispiece.
Bonaparte; A True Friend. Illustrated........ John N. Cole. 3
Two Pictures. Poem........ A. L. Vermilya. 4
A Coon Hunt in a Canadian Forest........ O. M. Arnold. 6
The Voice of the Hills. Poem........ Rev. R. S. Stringfellow. 7
Where the Bighorn Roams. Illustrated........ W. B. Lee. 9
A Mountain Tragedy........ A. L. Vermilya. 13
How We Lost Our Mules. Illustrated........ Nelson Yarnall. 15
The True Story of Daddy Binks........ Ernest Seton. 19
Madam Woodcock at Home. Illustrated........ Homer G. Gosney. 20
A Winter Cruise in Northern Maine. Illustrated........ Carroll Barker. 21
Reveries. Poem........ Arthur Hazleton. 22
A Strange Incident........ W. H. Nelson. 24
Will A Bull Moose Fight?........ Dr. A. C. Shoemaker. 25
They Will Return. Poem........ Rev. F. C. Cowper. 26
Hunting in the Arctic Rockies........ A. J. Stone. 27
Tiger Hunting in India........ C. E. Ashburner, 29
The Grizzly I Did Not Kill........ C. M. Coleman. 74
Slewfoot Arose in Front of Us and Stood Like a Statue........ Frontispiece
My First Experience on Snowshoes. Illustrated........ W. L. Graves. 85
Col. Taurus. Illustrated by Frontispiece........ J. W. Brady. 89
Hunting for a Place to Hunt. Illustrated........ H. H. Todd. 93
The Farmer's Petition. Poem........ A. L. Vermilya. 98
Hunting in the Baker Range........ T. C. Austin. 99
An Uninvited Guest. Illustrated........ Stanley Waterloo. 103
My First Camping Trip........ Rev. J. H. Fuller. 106
On Forbidden Ground........ J. Wills. 109
A Deer Retrieving Dog. Illustrated........ E. B. Collins. 111
On the Trail of the Four-Footed Locust........ Henry Howard Rose. 112
Is There an Ibex in this Country?........ 114
Boil It Down. Poem. Reprinted........ Joe Lincoln. 114
Each Trailing our Fiery Serpent of Hemp, and Both Feeling It
Was Likely to Be Our Last Ride........ Dan Smith........ Frontispiece.
Fighting a Prairie Fire. Illustrated........ Ramsay Macnaughton 167
Hunting the Bighorn in British Columbia. Illustrated........ Stanley Washburn 169
Through Colorado Canyons........ Dr. J. E. Miller 171
With the Leaping Ouananiche. Illustrated........ J. L. Mott, 3d 173
That Boy. Poem. Illustrated........ Lewis A. Browne 175
Jerry Poland and the Grizzly........ Rev. Francis Hope 177
The Good Chap. Poem........ Theodore Roberts 177
The Master and Tenny. Illustrated........ J. L. Tucker, Jr. 179
Quiz: A Kangaroo Rat. Illustrated........ H. A. Thompson 183
Bears that Climb........ T. B. Crapo 185
A National Game Preserve in Alaska........ W. T. Hornaday 188
March. Poem........ A. L. Vermilya 190
The Olympics and Their Elk. Illustrated........ F. A. Johnson 191
Fishing at "Cayugy Bridge." Poem........ G. A. Warburton 194
Congress Has Full Power........ Hon. John F. Lacey and Hon.
P. C. Knox 197
The Predicaments of a Poet. Poem........ Charles N. Douglas 203
She Came and Sat Down in Front of My Shelf........ Frontispiece.
The Hunted Hunter. Illustrated........ J. W. Hulse 249
The Valley of Forgetfulness. Poem........ E. H. Butler 250
Nesting Time. Illustrated........ Anna M. Matthews 251
Whip-Poor-Will. Poem........ Imo L. Stout 257
An Incident of Angling. Illustrated........ J. T. Hopkins 259
In Exile. Poem........ Warren Adams 261
A Bear in Camp........ W. F. Nichols 262

PAGE.
A Southern Bear Hunt. Illustrated .... Frank Farner 263
Hunting in Mexico. Illustrated .... Charles Wilmot 267
Seeing the Old Century Out. Illustrated .... Sidney M. Logan 269
Self Defence with the Revolver. Illustrated .... Jack Pattern 277
Camping in Colorado .... Dr. J. N. Hall 279
The Man Behind the Gun. Poem .... C. L. Bailey 282
I Ran Backward a Few Feet, Tripped, and Fell With the Lynx on Top .... Frontispiece
A Mix-up With a Lynx. Illustrated .... T. A. Ryer 331
A Lynx Hunt in Florida .... Dr. W. A. Reeve 333
The Bob Cat's Banquet. Illustrated .... W. L. Underwood 335
The Canada Lynx .... A. T. Bickford 337
Does the Lynx Destroy Deer? .... L. D. Gilmore 338
A Day on the Delaware. Illustrated .... Zane Grey 339
A Bear and a Pistol. Illustrated .... A. M. Powell 341
An Idle Fancy. Poem .... Candice Bramble 343
Woodchucks. Illustrated .... Ernest C. Adams 345
A Racket in the Rockies .... A. L. Vermilya 347
Down the Moon River. Illustrated .... L. S. Wilson 349
In Hell Creek Badlands. Illustrated .... William T. Hornaday 353
The Siminol Pirates .... Chas B. Wemple 357
The Grunt of the Game Hog. Poem. Illustrated .... William J. Lampton 358
Hunting from the Goff Camps .... Warfield Ryley 361
A Minnesota Muskalonge .... O. L. Thomas 362
He Stacked the Cards on Them .... Dr. W. A. Mann 364
I Saw Above Them an Eagle. Carl Rungius .... Frontispiece
A Feathered Hunter. Illustrated .... L. B. Storer 413
A Bear and a Caribou. Illustrated .... Greenhorn 415
A Mountain Lullaby. Poem .... Hattie H. Louthan 417
Partridge Shooting in India .... C. E. Ashburner 418
One Dolly Varden. Illustrated .... Louis Akin 419
The Foundling. Poem .... Rev. E. L. Tiffany 420
Canoeing on the Michigamme .... C. E. Berry 421
June Days on the Upper Pecos. Illustrated .... Edward G. Taylor 423
The Ol' Mill Pond. Poem .... George W. Slawson 427
A Trip to the Olympics .... W. S. Jones 428
Spring Voices. Poem .... A. M'Elrath 430
Held Up By Moonshiners .... J. E. Allen 431
Fishin' In De Ole Maine Woods. Poem. Illustrated .... Edward Bourne 434
What Becomes of the Horns? Illustrated .... M. A. Wilcox 436
Winter Blooming Huckleberry. Illustrated .... C. E. Pleas 437
When the Perch Begin t' Bite. Poem .... W. M. Schultz 437
Sheep or Goat? Illustrated .... Frank Melvin 438
A Prominent Game Protectionist. Illustrated 439
The Fiery Grotto. Poem .... Dr. L. E. Holmes 439

From the Game Fields, 33, 115, 204, 283, 365, 443
Fish and Fishing 45, 124, 211, 291, 373, 454
Guns and Ammunition, 49, 127, 214, 295, 377, 457
Natural History 54, 135, 221, 301, 383, 463
The League of American Sportsmen, 58, 141, 228, 305, 387, 467
Forestry 64, 145, 232, 312, 392, 473
Pure and Impure Foods, 67, 148, 235, 315, 395, 475
Book Notices 69, 237, 317, 478
Publisher's Notes, 72, 154, xxxi., 319, 398, 479
Editor's Corner 70, 151, 238, 318, 400, 480
Amateur Photography, 77, 159, 241, 323, 403, 485

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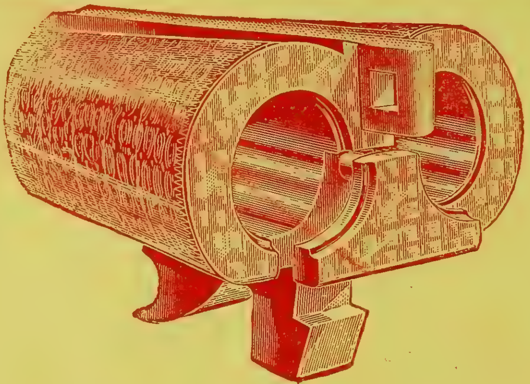

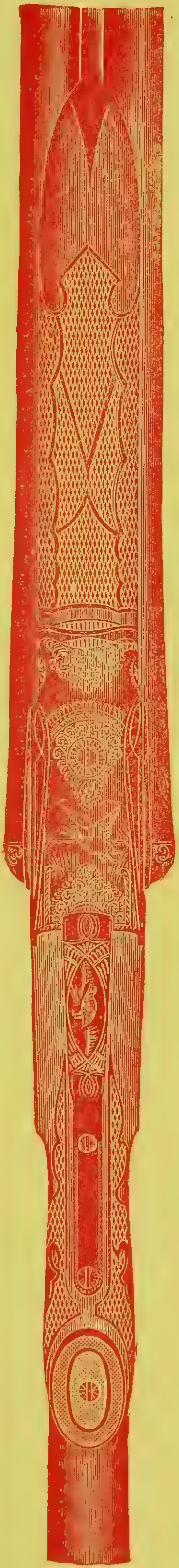

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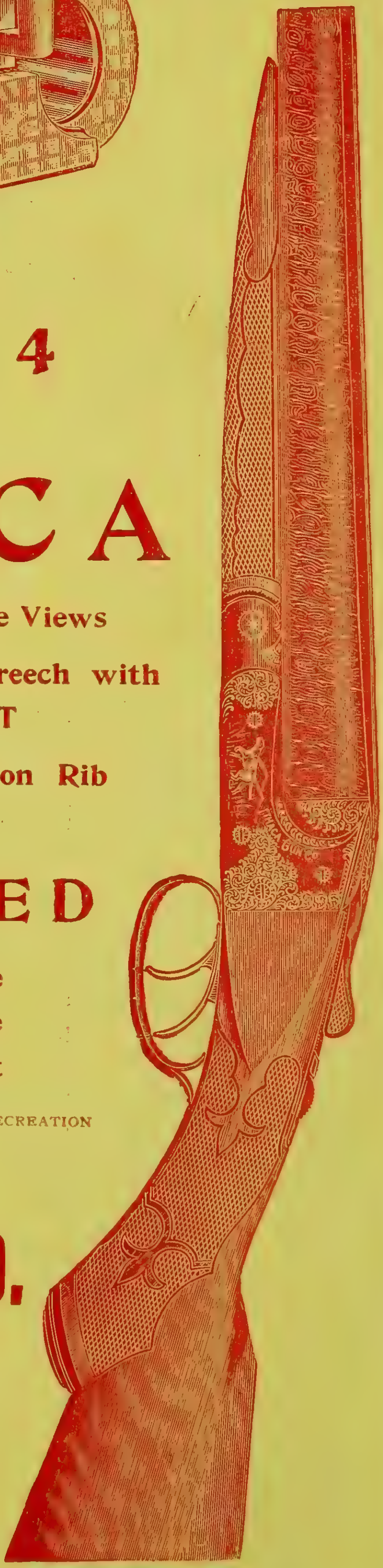

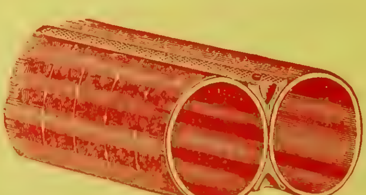

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CONTENTS OF THIS NUMBER

PAGE
That Is the Worst Cat I Ever Saw .... FRONTISPIECE.
Boneparte; A True Friend. Illustrated .... JOHN N. COLE. 3
Two Pictures. Poem .... A. L. VERMILYA. 4
A Coon Hunt in a Canadian Forest .... O. M. ARNOLD. 6
The Voice of the Hills. Poem .... Rev. R. S. STRINGFELLOW. 7
Where the Bighorn Roams. Illustrated .... W. B. LEE. 9
A Mountain Tragedy .... A. L. VERMILYA. 13
How We Lost Our Mules. Illustrated .... NELSON YARNALL. 15
The True Story of Daddy Binks .... ERNEST SETON. 19
Madame Woodcock at Home. Illustrated .... HOMER G. GOSNEY. 20
A Winter Cruise in Northern Maine. Illustrated .... CARROLL BARKER. 21
Reveries. Poem .... ARTHUR HAZLETON. 22
A Strange Incident .... W. H. NELSON. 24
Will a Bull Moose Fight? .... Dr. A. C. SHOEMAKER. 25
They Will Return. Poem .... Rev. F. C. COWPER. 26
Hunting in the Arctic Rockies .... A. J. STONE. 27
Tiger Hunting in India .... C. E. ASHBURNER. 29
The Grizzly I Did Not Kill .... C. M. COLEMAN. 74
From the Game Fields 33
Fish and Fishing 45
Guns and Ammunition 49
Natural History 54
The League of American Sportsmen 58
Forestry 64
Pure and Impure Food 67
Book Notices 69
Editor's Corner 70
Publisher's Notes 72
Amateur Photography 77

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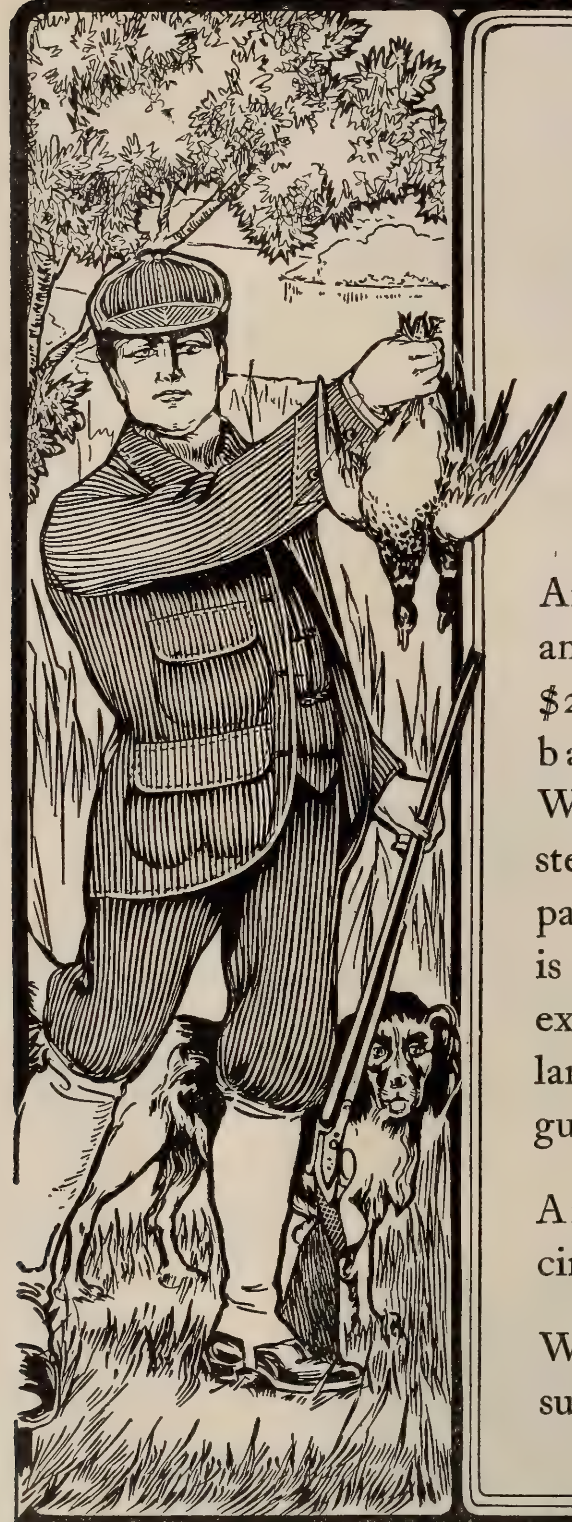

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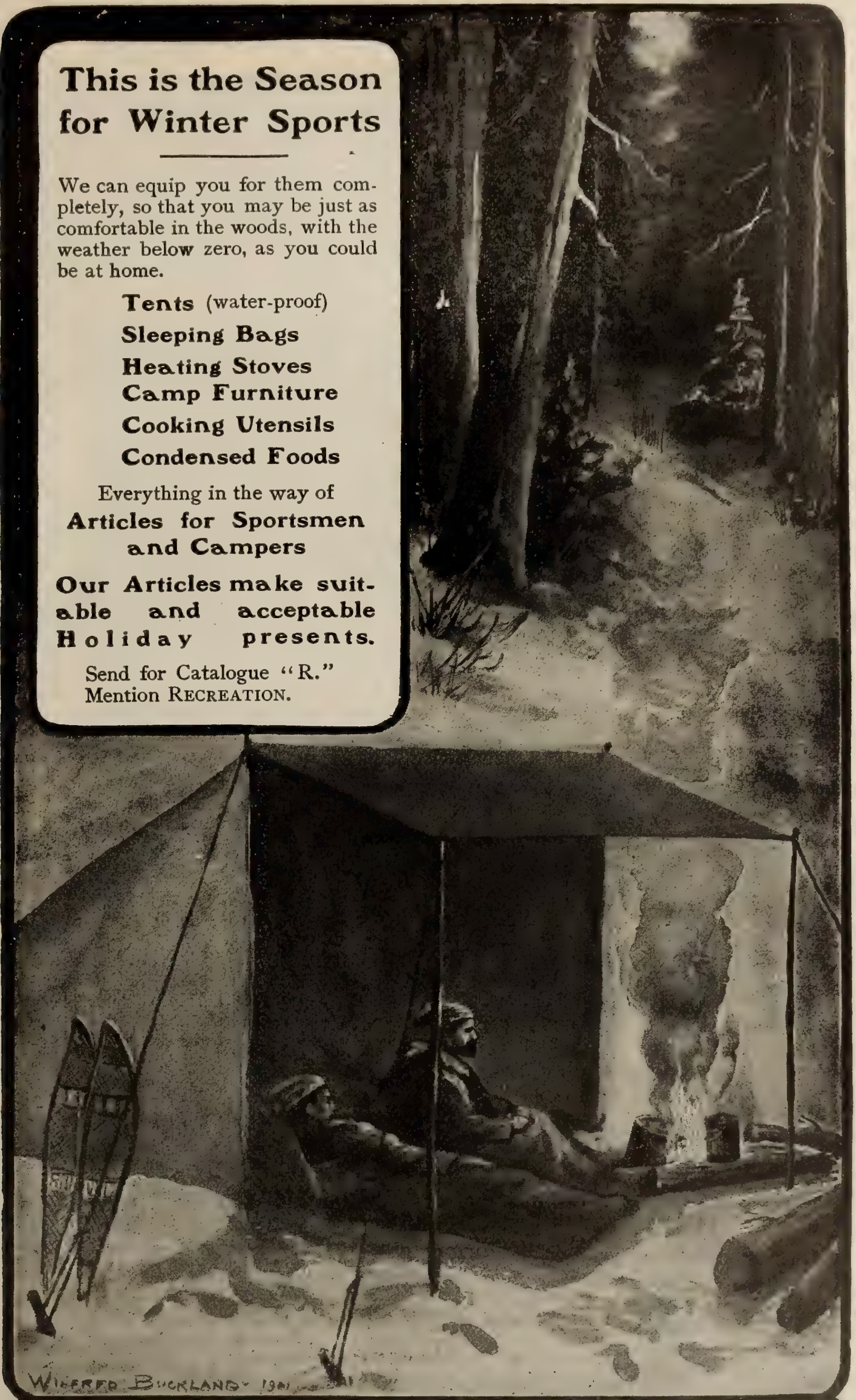

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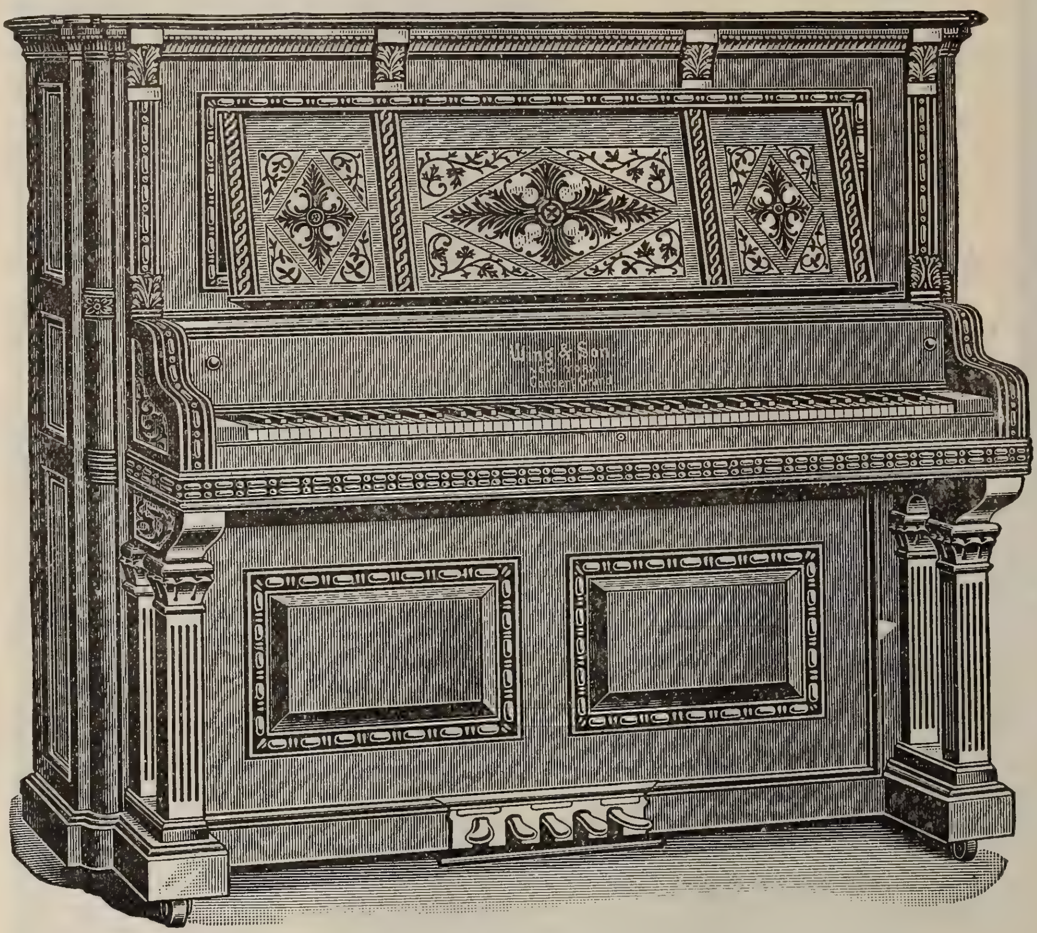

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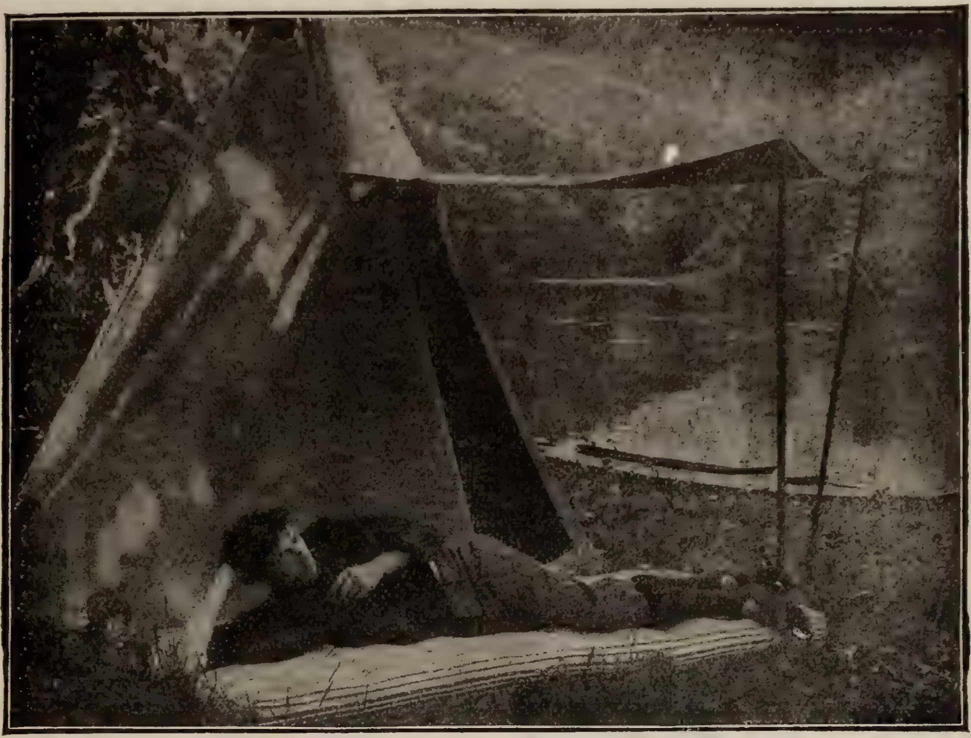

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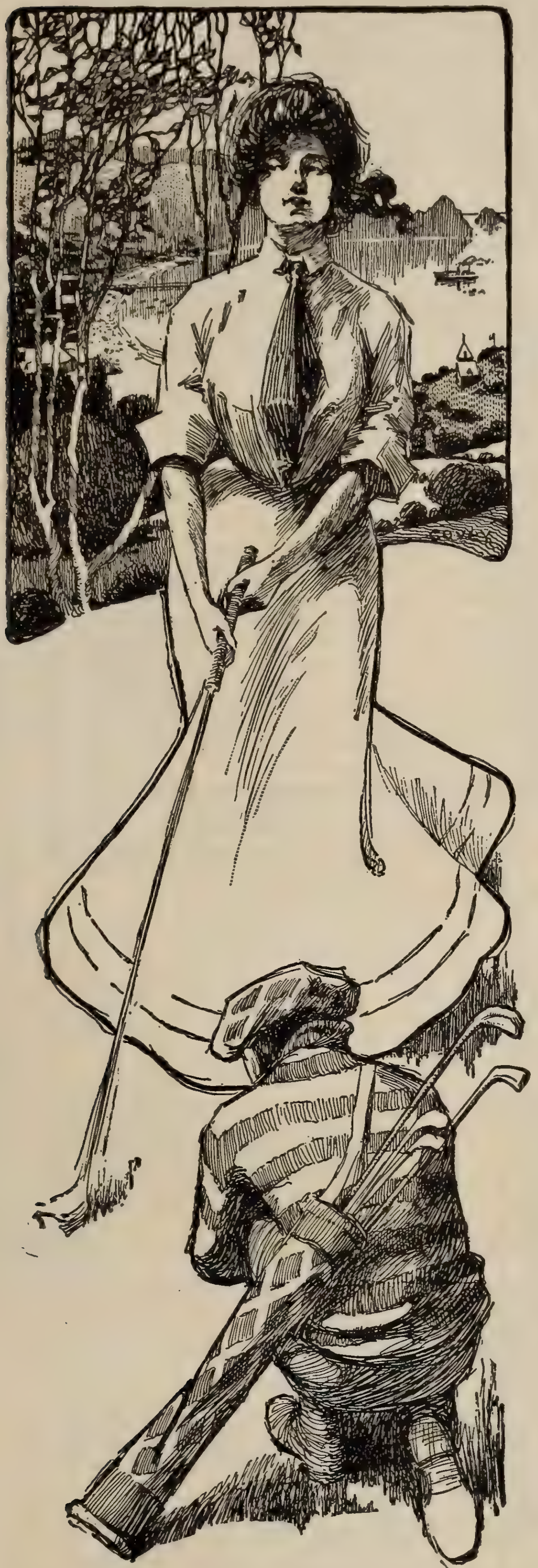

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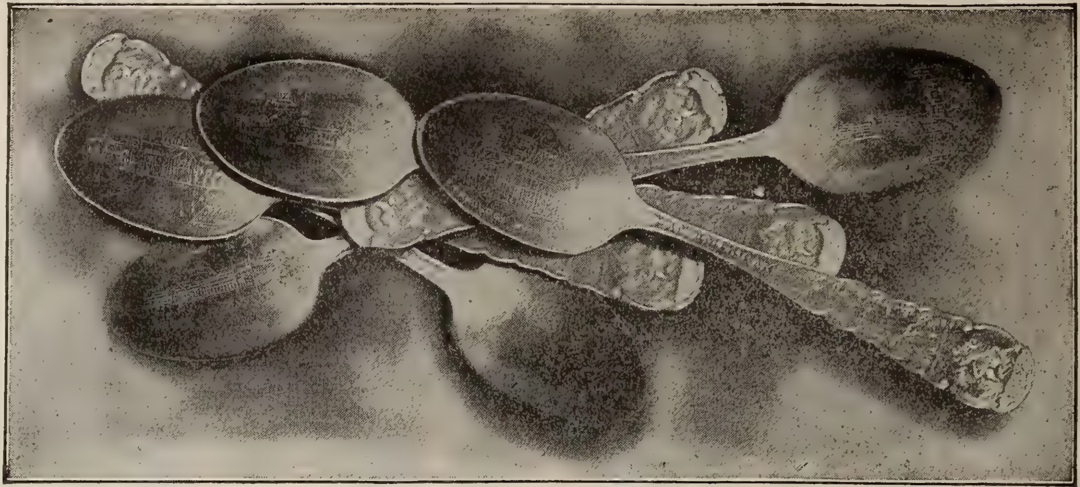

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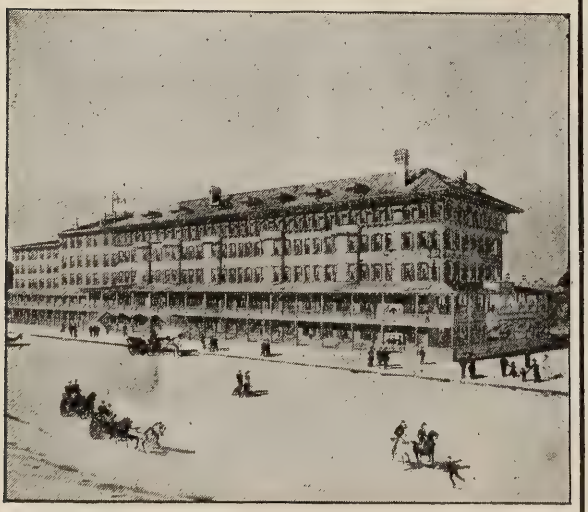

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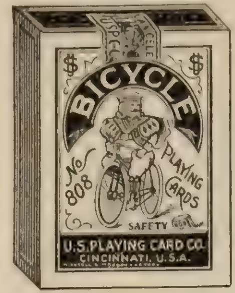

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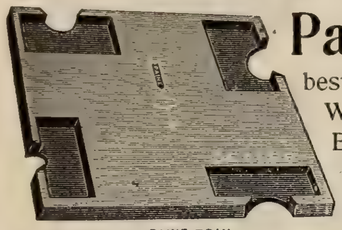

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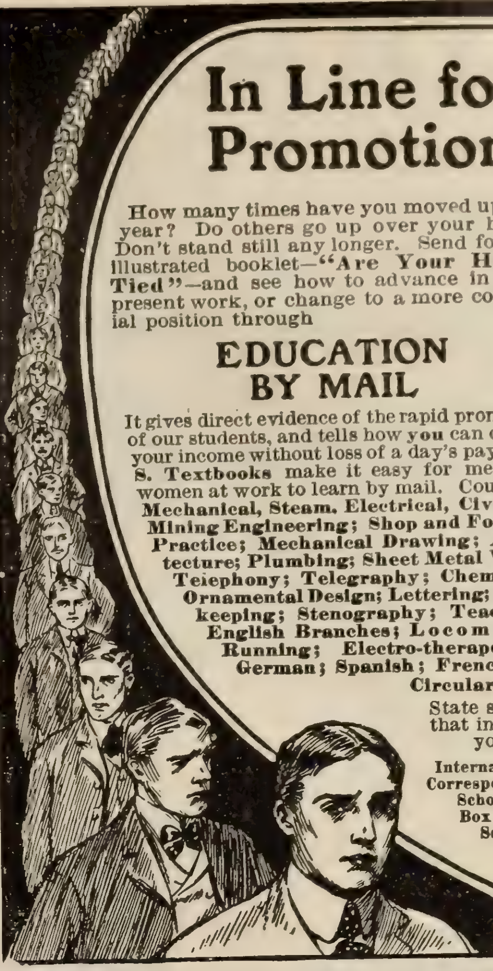

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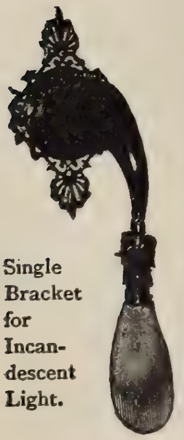

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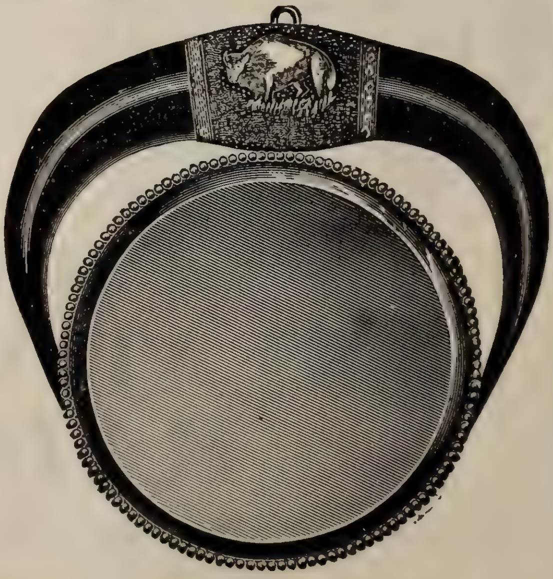

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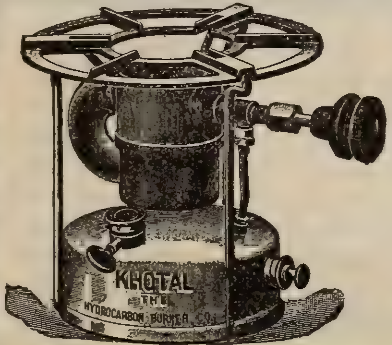

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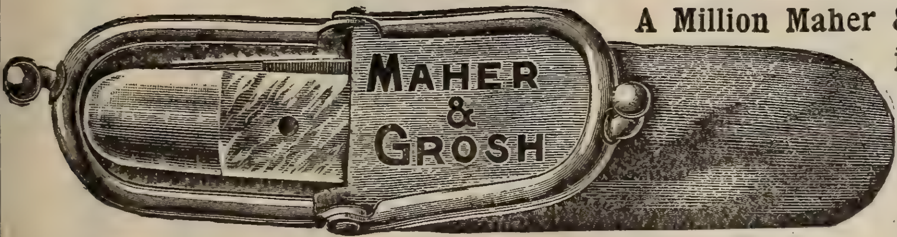

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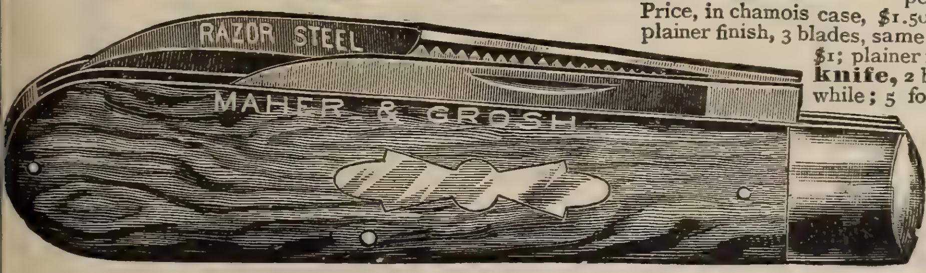

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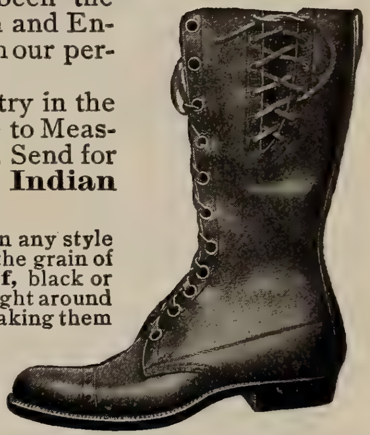

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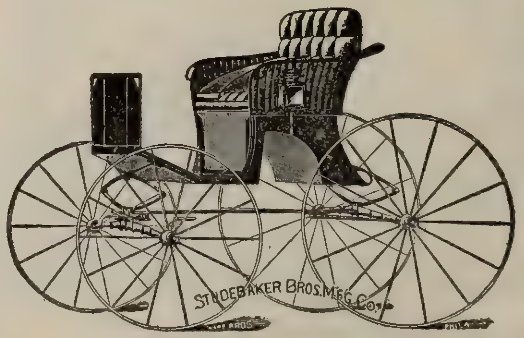
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I have on file measurements of all old customers who have bought the celebrated Thompson Hunting Boots and Shoes of the W. Fred Quimby Co. of New York for the past 20 years, and am prepared to make the same grade of sportsmen's footwear as in the past. I was formerly superintendent of the shoe department of that firm and have bought out the right to make these boots and shoes. Measurement blanks and prices on application. Mention RECREATION

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HUNTING BOOTS made permanently WATERTIGHT, soft and flexible, never water-soaked, hard and shrunken. DRY FEET for Sportsmen, Golf Players, Mountain Climbers, Explorers, all Workers *in wet and snowy fields*, and others obliged to stand about in water. Great for all WINTER FOOTWEAR and SCHOOL SHOES. Prevents cracking—Shoes outwear others 3 or 4 times. A boon to ladies wearing *thin-soled shoes* Fine for saddles, bridles, all harness. An unequalled Gun Oil, prevents rust, cleans, wipes close.

Sold in tins, BLACK 25c. and 50c ; YELLOW (for fair leather), 30c. and 60c. f. o. b. N. Y. Special prices in gross lots, or in bulk. Address,

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ON NEW YEAR'S DAY 1882

a young man took out 20 Year Endowment Policy No. 241,049. in the Equitable for $5,000—Annual Premium $247,45

ON NEW YEAR'S DAY 1902

he receives the Endowment in cash—and $2,523,45 in dividends—making in all

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In addition, he has been assured for $5,000 for 20 Years.

SEND THIS COUPON FOR PARTICULARS.

THE EQUITABLE SOCIETY, Dept. No. 16,
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Please send me information regarding an Endowment for $.............if issued to a man......years of age.

Name..............................

Address..............................

Telling You About It

The American Bankers' Convention met in Milwaukee in October and many of its members visited our brewery. They were astonished at the methods in use there; and numbers of them asked why we don't tell more people about them.

That is what we are trying to do; this advertisement is for that.

If you could see us brew Schlitz beer you would be forever a friend of it. But you can't all come, so we tell you about it.

We use the finest barley and Bohemian hops. Our yeast is the best brewing yeast in the world. It is developed forever from the same mother cells—cells that are priceless to us.

Cleanliness is carried to extremes. All Schlitz beer is cooled in plate glass rooms, filled with *filtered* air. Then the beer is filtered, and every bottle is sterilized after it is sealed.

Those who see this process never forget it; and Schlitz beer has a new relish afterward. It means absolute purity. It means that we double the cost of our brewing to get it.

Why do you drink common beer, and pay just as much for it? Is not purity worth asking for?

Ask for the Brewery Bottling.

Schlitz

THE BEER THAT MADE MILWAUKEE ·FAMOUS·

J. L. STACK

by several bulldogs that had interviewed him.

During the summer, he slept, from choice, on the mat at the front door. Nothing could cross the lawn in safety after the lights were out. One night when I was away from home, he ran a man into a barn and kept guard at the door an hour. My neighbor, who saw the performance, preferred not to interfere, so the intruder made his escape.

When I moved to Montana, 5 years ago, I gave him to a friend in Gowanda, N. Y., where he still lives, loved by all our old friends. For nearly a year after I left he made daily trips to the train, looking for the return of his old master. The man who owns a faithful dog has a friend indeed. I would be just as glad to see my old dog again as I would to see the dearest human friend I left behind.

TWO PICTURES.

A. L. VERMILYA.

On the walls of my cosy, book strewn den
Are two pictures, neatly framed;
One is "A Glimpse of a Fairy Glen,"
The other "Good Luck" is named.

One shows a tent in a woodland nook,
With the sun just going down
O'er the mountain top, where the light-shafts look
Like the spires of a distant town.

And grouped round the camp fire's cheerful glow
As they watch the fading day,
Are men, telling stories of long ago,
Or smoking their pipes of clay.

You can almost feel the air grow chill
As the cool breeze sweeps along;
You can almost hear the lone whip-poor-will
As he chants his plaintive song.

In the other view is a placid stream,
Where the sun-kissed waters glide
'Tween the grassy banks where the lilies dream,
As they rock on the silv'ry tide.

In a boat fast moored to the nearer shore,
Are two bright eyed little girls;
They have gathered of blossoms a goodly store,
Which they toss where an eddy swirls.

From the bank a man casts a dainty fly
Far out on the river cool,
For the bass that lurk where the green weeds lie
In a shady, crystal pool.

These are the pictures that bring to me
In my den on the city street,
The sound of the whisp'ring maple tree,
And the wildwood odors sweet.

Which is the better? Ah, who shall say?
I have never made the choice;
Both breathe of a mellow autumn day,
Such as maketh the heart rejoice.

AMATEUR PHOTO BY GEO. G. CANTWELL.

GRAYLING, THE TROUT OF THE YUKON.

A COON HUNT IN A CANADIAN FOREST.

O. M. ARNOLD.

The fight you are making for the protection of game is worthy of material support, and I enclose fee for a year's subscription. The inherent nature of man to kill is a heavy handicap against you in the race on which you have entered, but the gradual disappearance of game in all parts of the country may act as a warning and offset the natural inclination.

In my boyhood I was fond of dog and gun. My father was a good hunter and my mother was an ideal shot. I have often seen her select a chicken walking in the yard and shoot it in the head, offhand, with a rifle. Their home is in Kent county, Western Ontario. Not many years ago there were plenty of wild pigeons, quails, grouse, ducks, geese, wild turkeys, black squirrels, rabbits, ground hogs, foxes, deer and coons. Most of them have disappeared on account of not being protected. I live in the beautiful Muskoka Lake District of Ontario. Until recently deer were found here in herds; now they are scarce. In Ontario we have a game law which limits the number of deer any person may take in the open season, but that is offset by the number of persons who hunt. The law is supposedly enforced by officers who are appointed by the government without regard to any qualification save political good conduct. The game warden is clothed with extraordinary power. He may be, and is, informant, prosecutor and, being ex-officio a justice of the peace, judge of his victims. These are generally poor settlers who only come within the scope of the law by killing for food during the close season.

The result is there is little killing done by settlers, and during the open season the country is overrun by hundreds of hunters and trainloads of hounds, who carry on a war of extermination. They slaughter deer in the water and on well marked runways as if the poor animals were deadly enemies of man. If hounding were prohibited not only would deer increase but good still hunters would be developed. Now there are few worthy the name.

My favorite sport was coon hunting. An article in March RECREATION, by W. A. Bruce, brings to mind my last coon hunt. Mr. Bruce apparently did his hunting with hounds. I never fancied them for coons. I have found them too apt to run the back track. Their power of discrimination is not good. It is anything but pleasant to fell a big tree and find it the one the coon left hours before. The hounds I knew were also inclined to run foxes, or perhaps spoil an evening's sport by pouncing on an unwary skunk.

A coon in front of a slow hound always takes a big tree. That does not happen so often with a smarter dog. They are often forced to take a small tree or be caught on the ground.

The best coon dogs I have known have been yellow dogs—collies and crosses of other breeds. The proverbial uselessness and meanness of a yellow dog must have been imagined by some person who never owned one. My last hunt was with a yellow dog. He was a collie, above the average in size. As a pup he had a bad reputation in the neighborhood where he was raised. He fell into the hands of a man who presented him to my father as a sort of practical joke. The dog had a fine head with plenty of brains and eyes that bespoke his every mood. We all soon fell in love with that hitherto despised yellow dog. He turned out well and proved a great coon dog. When he barked up a tree a coon was surely there.

The time of which I write was a fine fall evening. The frost had cleared the trees of leaves, and there was just enough moonlight to enable one to go through the thin woods without a lantern. I had gone home from school for a few days, and was sitting in the dining-room reading. Suddenly there came a scratching at the door and the dog began to whine. I hastened out and the yelping of dogs told me a coon tree had been cut on an adjoining farm, and that the game had got away. The dogs followed fast on the track, through a bit of brush, across a cleared field and over the highway into our woods. It was what we called a swamp coon, old and wary. He knew exactly where he was going. It was to a stately elm, the largest on the property. The coon had often escaped by reaching that tree.

After calling me out the old dog started for the noise, but a word from me brought him back. Soon the other dogs became quiet, and as there was no immediate sound of axes I knew the coon had reached the big elm. The animal frequented a corn field near where he was first put up. His tracks, frequently seen in mud and soft ground, showed that he was a big fellow. My father had given our neighbors permission to cut the big tree the next time the coon took refuge in it. On other occasions they had left him there and hunted a new quarry. That night, however, they decided that the tree must come down and the coon be captured at all hazards. Thus it was that at length the merry sound of the axe broke the stillness of the night.

The sound again put fever into the veins of my dog. I put a chain to his collar and told him we would go. The gladness of his soul, if dogs have souls, was expressed in his eyes and accentuated by the wagging of his tail.

On arriving at the woods I saw by the cutting which way the tree would fall, and took a position where I would be safe from falling limbs.

We waited patiently enough until the cracking of the tree as it started to fall set the old dog wild. He had often heard that sound, and knew it was the prelude to a keen chase and perhaps a fierce fight. I unsnapped the chain and held him by the collar with one hand while I closed his mouth with the other. The time had not come to make our presence known. The swish and crash of limbs as the great elm came roaring down through the other trees was too much for the dog, and he set up a lively fight to get loose. When the tree struck it shook the earth. I had to let the dog go, even at the risk of his being struck with pieces of limbs which continued to fall. A coon is seldom hurt or killed by a falling tree. That one was no exception to the rule. Almost immediately he leaped from the top and made off at marvelous speed in the opposite direction from the light and the other dogs. As he ran past me I whistled for my dog, but he was already on the track and he caught the coon in a few seconds.

The other dogs were not yet through the top, and were hunting for the track, followed by the boys with the lantern. I had the fight all to myself. Over and under they rolled, each growling and fighting in his own particular fashion. When the other dogs arrived on the spot the fight came to a sudden end, and a coon paid with his life for the crime of living.

THE VOICE OF THE HILLS.

REV. R. S. STRINGFELLOW.

I know a place where mountain peaks
  Look down into valleys deep;
A place where the clouds come down to
    rest
  And where the storm gods sleep.

I have seen the spirit of storm come forth,
  With his frown and his ghostly shroud,
And revel awhile in the valleys below;
  Then back to his home in the cloud.

Back to the gulch's hollow throat,
  And the cavern's yawning gap;
Far in his cloud pavilion
  He goes for his evening nap.

I have seen him come from his chamber,
  And, like an eagle in his flight,
Cover the stars with shadowy wings,
  Blacker than Egypt's night.

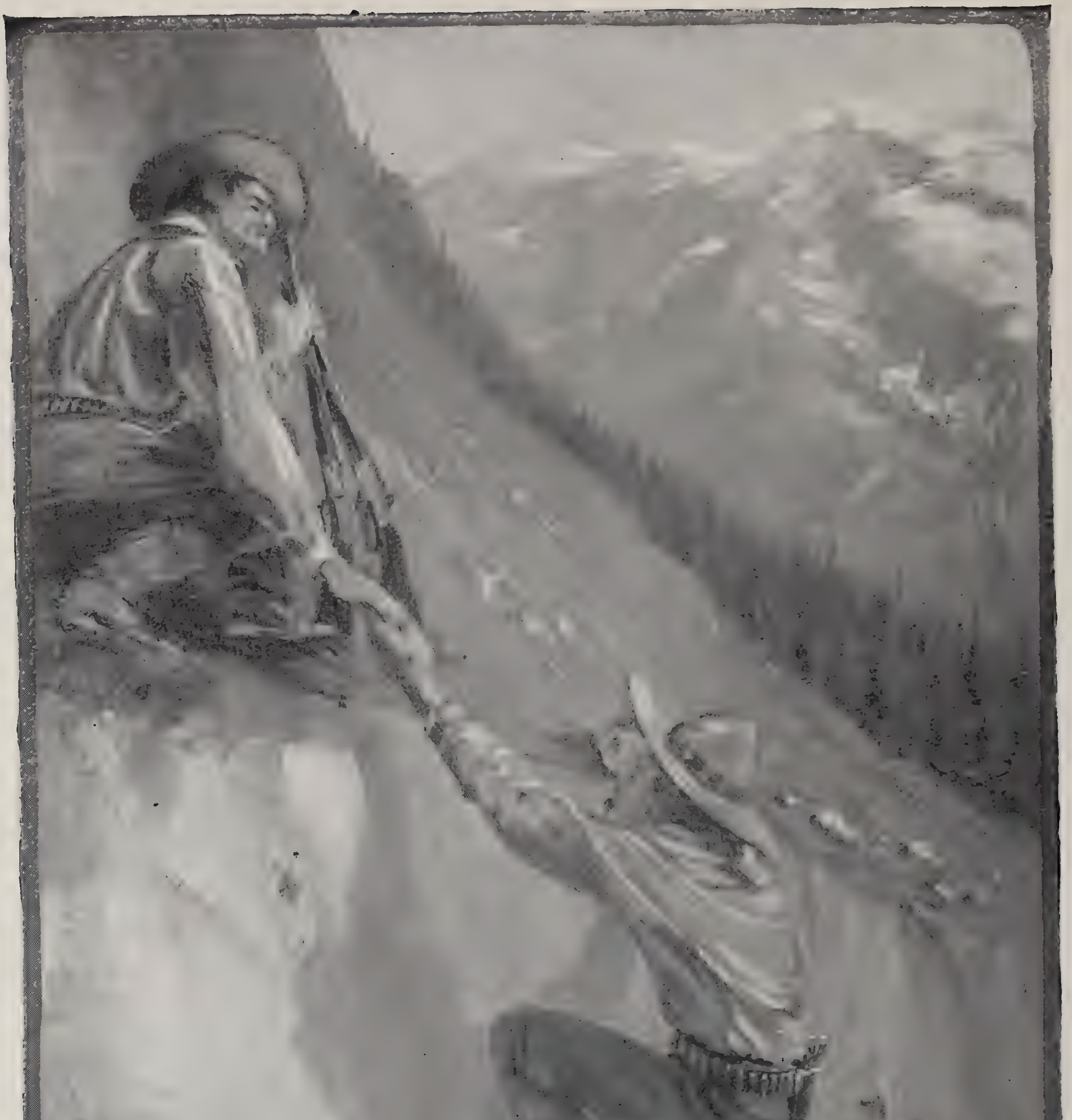
Then have I seen the Morning rise,
  With glittering lances of red,
And send the retreating storm fiend
  Back to his mountain bed.

I know the winding valleys,
  All dark with hoary trees,
That cast their elf-like shadows,
  And quake with every breeze.

Far from the noisy railroads,
  That tell of the haunts of men,
Back in the wooded gulches
  Where the panther makes his den.

Back where the rivers start and flow,
Fresh from the everlasting snow;
  Splashing the rocks with fleecy spray,
  Leaping the boulders and cliffs in the
    way,
Down to the hills below.

Farewell to the dust and the crowded
    streets!
Farewell to society's empty sweets!
The mountains look down through the haze
    with a smile
And bid me come with my rifle a while.



“WHERE I HAD TO GIVE UP MY GUN AND BE PULLED OVER.”
8

WHERE THE BIGHORN ROAMS.

W. B. LEE.

Last fall the opportunity came for K. and me to go to the extreme Northwest for bighorn and mountain goats. My outfit consisted only of one corduroy suit and an extra pair of trousers; 2 heavy flannel shirts; 2 suits of underwear; an extra weight football sweater, for night; a rubber blanket; a pair of Hudson Bay Company 4 mark blankets; a sleeping bag and toque, or night cap; 3 pairs of lumbermen's socks; 2 pairs cotton socks; hob-nailed shoes; Penetang shoe packs; 2 pairs of moccasins; felt slippers; handkerchiefs; towel and soap. These all went in a large canvas waterproof bag, called in the North a turkey. Besides these, I took a small leather carryall, into which I put reels and fishing tackle, hand mirror, comb, shaving apparatus, memorandum books, thermometer, a few medicaments, needles, thread, and such small things.

Although we were 2 days in reaching St. Paul, the real journey seemed to begin there. As K and I boarded the Great Northern train the thrill of anticipation was keen. The journey West from St. Paul up to the backbone of the Rocky mountains was interesting but not exciting. The trees in sight might have been counted; but when we began to descend the other side everything was changed. Canyons and valleys, swift running streams and rivers, and great forests of firs, pines and spruces made a delightful change. We finally reached Spokane, and about 2 o'clock in the morning of the fifth day we and our belongings were dumped out at the lonely station of Wenatchee. There the railroad crosses the Columbia river, where it takes its second turn and starts West on its final journey to the Pacific. It comes to Wenatchee from due North 70 miles, and up that distance we were to go to the Bend, where the river comes down from the Northeast.

We made a perilous passage in the dark from the station with our trunks down to the river, the banks of which seemed at that time the sides of a good sized canyon. We couldn't see the water when we got there, but could hear it rushing and boiling along. I had heard the current was swift; it sounded that morning like a cataract. The little steamer which goes up twice a week was chained to the bank, and we climbed on board and lay down on the deck to wait until daylight.

At 5 in the morning I was awakened by the efforts our craft was making to get started. I was at once impressed with the fact that the boat was built strictly for business. It had a strong, scow like hull, with a square stern, across which, the extreme width, towered a great paddle wheel; a slightly built superstructure of a cabin; and extremely powerful engines. The machinery seemed to take up most of the room, and it was all needed, for this stretch of 70 miles of so-called navigable water is said to be more dangerous than the Yukon. The fall is 594 feet in the 70 miles. The steamer goes up twice in some weeks, and some weeks it doesn't go at all.

The current averages 6 to 10 miles an hour, with 2 heavy rapids, the Methow and the Entiat, thrown in. In some places we seemed barely to move for some minutes, the volume of water was so tremendous. The color was a deep blue or green, more intense than that of Niagara; indeed, I can find no standard of comparison except with the Niagara below the Whirlpool, as seen from the Gorge railroad. The Columbia, pouring its mighty flood, second only to the Mississippi in volume, through these outposts of the Cascade mountains, is still not dwarfed by its environment.

Back from the river, with a high water mark of 40 feet, the mountains rise, with no sign of vegetation except sage brush. It reminded me of the Arizona desert in the brilliant sunshine, except that this river might irrigate 2 or 3 arid Western States.

The catch of salmon in the Columbia supplies most of the civilized world with the canned commodity. They are taken by all sorts of mechanical contrivances in the early part of the summer; the wheel, an arrangement which scoops them out wholesale, being the most deadly. I was tempted by the sight of some fish as we ran by the points, and laboriously got out about 400 feet of troll, but caught nothing except the blades of our big paddle wheel.

Virginia City, the head of navigation, was reached at 8 p. m. It contains a hotel, a post office, one store and 5 houses. Just before reaching there we passed the mouth of the outlet of Lake Chelan, which lies about 40 miles West in the heart of the Cassade range. The United States Geographical Survey is now exploring it, and has sounded to a depth of 2,750 feet in the lake without reaching bottom.

The next morning we started due North 100 miles, by a primitive 2 horse wagon called a stage, for British Columbia, where we had been led to believe the bighorn and the goat could be found in their most unsophisticated state. It was extremely dusty, for the Eastern slope of the Cascades, unlike the Western, resembles a desert, and there had been no rain for months. Sage brush abounds, and in the valleys and along the foothills there is plenty of bunch grass. With irrigation anything may be raised there except tropical fruits, and I can readily believe that the State of Washington has a great future before it in fruit.

AMATEUR PHOTO BY W. B LEE

THE CAVALCADE WAS IMPOSING.

We passed through one busted mining town. It boasts the only plank walk in Okanagan county, a section as large as Connecticut. The one street is lined on one side for a quarter of a mile with houses, all but 2 of which and the hotel are now empty. Three years ago the town had 1,000 people and 20 saloons. There are now said to be 2 men left.

We spent the night in Conconully, the county seat of Okanagan, and the next morning we went on again by stage through the same succession of valleys, mountains, divides and canyons, reaching Loomistown, a small mining town near the frontier, in the afternoon of the second day's staging. There we outfitted and were met by our guides, Carlos, Edouard and Henricus. They came in with the horses, true to appointment, within half an hour of our arrival. That we thought remarkable, as we had not had time to hear from them in answer to letters fixing the time and place of meeting. Our own journey by railroad, boat and stage was upward of 3,000 miles, and they came from widely separated points; yet we met as if we had been run out of pneumatic tubes on schedule time.

We crossed the boundary and rode late into the night by the light of a glorious

AMATEUR PHOTO BY W. B. LEE.

GOING UP THE SIMILKAMEEN RANGE.

moon, fording the Similkameen river, on and up until we reached the last ranch. I never knew just where or when the frontier was crossed. The cavalcade as we started the next morning was quite imposing; 5 saddle horses and 5 pack horses. The latter are not led, and have no bridles. It was interesting to see them instinctively take the zigzag course when we began to climb. I wished at one time that they had been led, for one of them got to bucking on the side of a mountain and finally rolled until the pack got loose, and my bag never stopped until it reached the bottim of a canyon.

AMATEUR PHOTO BY W. B. LeE.

THE CLOUDS WERE THICK ABOVE, AROUND AND BELOW US.

We kept on all that day, and the next morning, turning sharply to the West, we commenced to climb in earnest. We were going up the Similkameen range about 7,000 feet above the valley, and I found that everything up to that time had been child's play. It is risky to camp high up at that time of the year, but if one is going to hunt bighorn he must camp where they live. Of course, one can not hunt on horseback, and if he camps low he will have to climb some hours every morning to get where he may hope to see his quarry. So we kept on and up all day with the horses. For the first hour or 2, whenever I had doubts about the ability of my animal to connect with the elevation where his forelegs might be placed, I promptly slid off. I soon found, however, that the horse was perfectly unconcerned, no matter how hard he might be struggling, so thereafter I hung to the pommel of the saddle and looked at the scenery, which was well worth it. Away to the North, over wave after wave of pine covered mountain and valley, was Eagle pass on the Fraser river, through which the Canadian Pacific railroad works its way to the ocean. Sharply defined against the Western horizon was the serrated line of the Olympic range on the coast; and more than 150 miles to the South the snowy summit of Mt. Tacoma, nearly 15,000 feet above the sea, was a ghostly phantom, seen now and again in the clear sky of that upper region.

Finally we reached the land of stone slides and ice. There the canyons run themselves up and out of soundings to the humble dimensions of small valleys. The only trees left are dwarfed and twisted into all manner of forms by the violence of the mountain winds, and the weight of snow and ice from which they are free but a short portion of the year. It was late when we reached a spot where we could camp, but a cheerful fire relieved our depression, and we felt at home as we sat down to a big supper of venison, potatoes, bacon, beans, stewed prunes and tea. As we expected to move on in the morning, we rolled ourselves in sleeping bags and blankets under some low spruces and pulled the tent over us for a tarpaulin. The weather changed in the night, and we awoke to find ourselves with an additional blanket of 2 inches of snow. The clouds were thick above, around and below us, and it was snowing and blowing a gale.

That storm lasted 3 days and kept us right there. We got the tents up, kept big fires going and were comfortable in body, but the delay was exasperating. The temperature went down to 7 degrees and snow fell 18 inches deep on the level. That was one of the chances of camping high. We afterward learned that the sun was shining most of the time in the valley far below. He appeared to us the fourth day and we started, traveling all day over the ridge, and finally going into camp somewhat lower down, on a slope with a southern exposure, where the snow might be expected to melt. I had hoped to get some fishing in the little lakes, but found them better adapted for skating rinks.

The next day was clear and warm. Soon after daylight Carlos and I started in one direction and K. and Edouard in another. As we did not expect to return before night we took some raisins and chocolate in our pockets for lunch. We kept going all day, down one deep canyon, and then straight up to the top of the mountain. Thence we returned to camp by a ridge overlooking some likely spots. My guide's favorite way of ascending a mountain was to use a stone or rock slide, which is something like the track an avalanche leaves, as a kind of ladder. It was hard work, and was made still harder by the need of going quietly. One stone dislodged and sent rolling on its way to the bottom might spoil a chance. There were places, too, where I had to give up my gun and be pulled over the points where I could not get a foothold. The more precipitous and dangerous the point the more frequent were the sheep tracks and signs. Bighorn hunting gives one the joy of surmounting real difficulties.

I had an opportunity to kill an ewe the third day, when trailing a cinnamon bear. This bear had deliberately and maliciously led us to abandon our main enterprise by appearing to Edouard, who was looking for the horses and had no gun. Edouard said the distance was 30 feet, and that he knew this because the bear and he stood and examined each other for some time. The report of the animal's size sent us after him with our guns; but we tracked him without getting a shot. However, we came on a band of 12 sheep, all ewes, and had a fine opportunity to study them. They came trotting along over the rocks, going to afternoon tea somewhere, I suppose. When K.'s rifle banged they were on the edge of a bluff where an elevator would have been the proper thing; but they were down it and off in an instant. All but one, which we had the pleasure of eating. It was like the best mutton, with a venison flavor.

The proportion of ewes to rams is about 10 to one, and the latter are generally found alone. The one which I had the good luck to meet we discovered about 11 in the morning after 4 hours' hard work up and down a rough mountain range. He was half a mile away, and, seen through the glass, was a typical picture of his race. He stood motionless on the edge of a great cliff for some minutes, apparently enjoying the extended view. The wind was blowing a gale diagonally down the mountain, and it was impossible to get above for a shot. There was no cover to hide a nearer approach, except some scattering trees and one small canyon. We waited some time in the hope that he might work toward us, and thus give me an opportunity to shoot. Instead of doing so, he began to move higher, and we were obliged to follow, keeping at about the same distance, but below a shoulder of the mountain and out of his line of vision. He led us a climb of about 2,000 feet, and then after a while went down again and took us far below the point from which we started. It was then about 3, and Charlie said we would have to get nearer and take our chance. We managed to reach the canyon without being discovered by the ram, and about 20 minutes' work took us across and up the nearer side. Then for 200 yards we crawled flat until we reached some trees and stood up.

Something alarmed the ram at that moment. He gave a jump which seemed, to my excited vision, to take him 50 feet farther away, and I had to shoot! I shot twice; and as he ran along below, only his head and the top of his back showing, I shot twice more with no hope of hitting. I then sat down to reflect and smoke a cigarette, the first since morning; but Charlie was down the mountain, making for the canyon we had crossed, and called me to follow. I rolled a good part of the distance, and finally brought up near him at the edge of a high cliff. Our bighorn had stopped a while, but was now going on the full jump through a little draw into the big canyon about 200 feet off. Only one bullet had touched him. It was enough. It had passed in back of his shoulder and completely through his body. He was a 3 year old, with the horns, of course, of small size, but with a wondrously wise expression.

It was then 4 o'clock, and having had nearly 5 hours of the most interesting stalk I can ever hope to experience, we started up the mountain in the face of a driving storm of rain, which became snow as we got higher. I was completely encased in ice and snow, which on top of the range was almost driven through the texture of my clothes. When, late in the evening, we turned into the light of our camp fire we made an impression on K. and the others that they will not soon forget. A complete change into dry woolens, a big drink of whiskey and ginger, and a tremendous supper, sent me to bed comfortable and happy.

A MOUNTAIN TRAGEDY.

A. L. VERMILYA.

It is a beautiful afternoon in the picturesque and rugged West. The air is clear, and cliff and gorge, rock and rivulet, make a picture such as no artist can ever hope successfully to transfer to canvas, and such as can be seen only in this enchanted land. Here Nature reigns supreme and undisturbed.

On a smooth rock, at the foot of a trail which winds its devious way far up among the mountains, a hunter is reclining. His buckskin garments and general air and make-up denote that he is a well-seasoned denizen of the West, a rover of mount and plain. His rifle stands at his side, in a cleft of the rock, and his only business, at present, appears to consist in enjoying the autumn sunshine and the majestic mountain scenery.

Anon he glances dreamily up the trail, when his eyes open wider as he discerns, far above him, something of interest. Now he sits upright, and looks intently. High up among the rocks, and so far away that he appears but a pigmy, a man stands a short distance from a bend in the trail, and close to a towering mass of jagged rocks with paths running among them in all directions. His gun is at his shoulder, and he appears to be waiting for something. Perhaps he has seen some animal, and is waiting to catch another glimpse of it as it rounds the bend in the pass, on its downward way.

The hunter down the trail is really interested now. He takes a small field glass from his pocket, and standing up, surveys the scene above him.

"Great rattlesnakes!" he ejaculates, after gazing steadily up the pass for several seconds; "what's the matter with the chap? Is he glued or froze to the rocks, with his gun p'intin' at nothin'? One of them tenderfeet, I reckon, that's stoppin' down at Baker's. Don't s'pose the cuss can tell a coyote from a sand peet, or a broncho from a sufferin' Sam. There's game, too, plenty. Grizzly, sure as shootin'!" In his excitement, he takes a few steps forward, the glass still at his eyes.

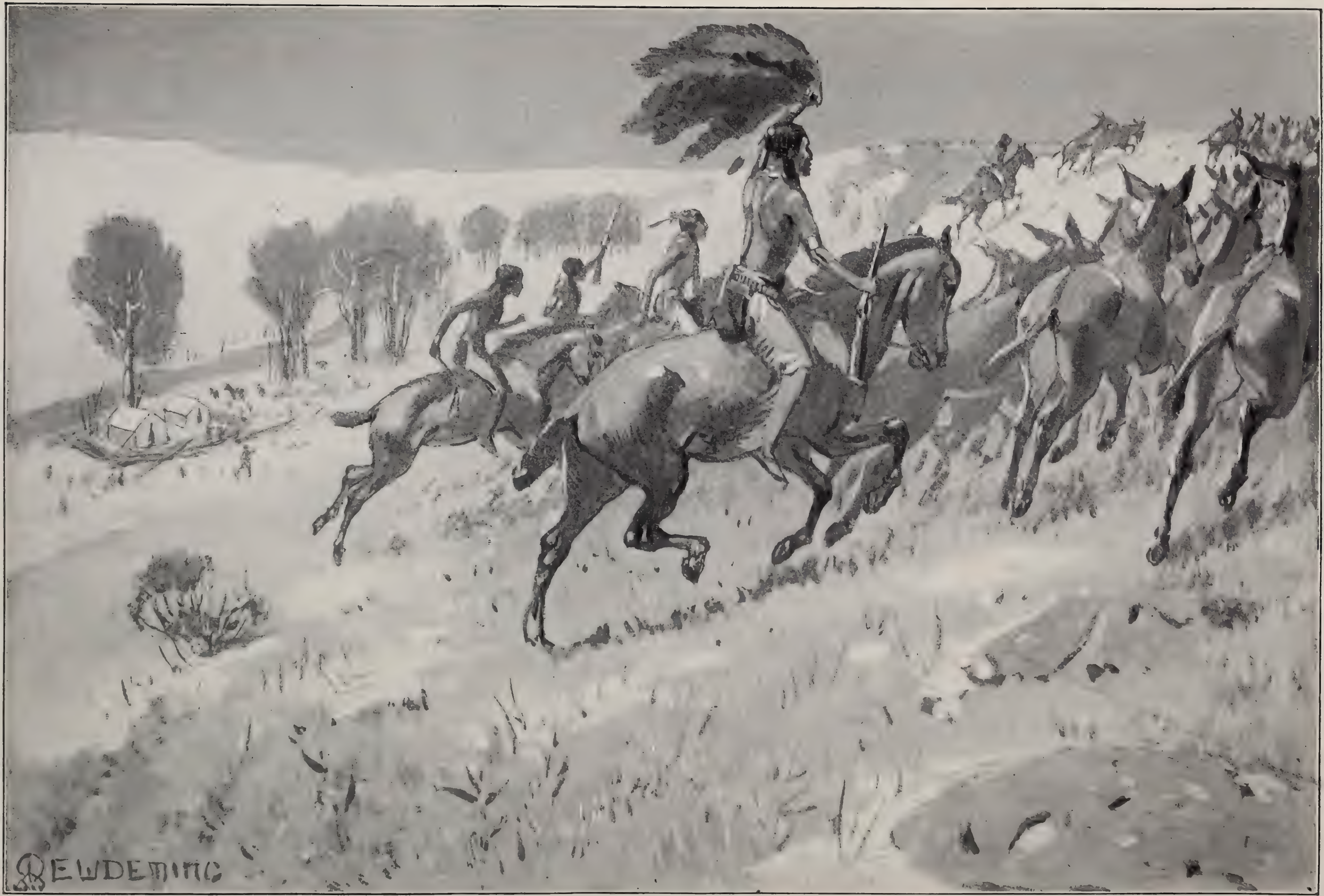
Around the bend slowly shuffles the great bear, and then comes the faint report of a rifle from the rocks above. The grizzly rears on his haunches, while his huge paws claw at his breast. He is hit hard. In an instant he catches sight of his enemy, and dropping on all fours, he makes a rush at the shooter. The man bravely stands his ground, and twice raises his rifle to his shoulder as if about to shoot, but does not do so. He seems bewildered, and just as the wounded and infuriated beast is almost on him, the man turns and flees, carrying his rifle with him. Man and beast quickly disappear among the rocks.

"Well, by the jumpin' Jews!" exclaims the man in buckskin, taking the glass from his eyes; "of all the fool tenderfeet I have ever happened to run across, this one beats the world, with several smaller planets throwed in for good measure. He is surely a green image. Must have been kinder paralyzed like. 'Mazin' bad fluster a man must be in to wound a grizzly an' then jest stand around till the varmint is plum ready to chaw 'im. Ought to pumped lead into the critter long as it held out. Don't pay to take no chances on that sort o' game. From the East, prob'ly, an' thought a grizzly a mild sort o' beast. Bet it kinder surprised him when he see the varmint pacin' along to'rd him with his war paint on. Dash bust a fool, anyway!"

It is mid-afternoon by the time the Westerner reaches the spot where occurred the peculiar battle between the tenderfoot and the grizzly. "Must have scairt the chap clean across the divide," he says, as he moves along. Now, he rounds a sharp angle in the trail, and with one swift glance his eyes take in the scene of a tragedy. A few feet apart lay man and bear—both dead. The man was chewed and clawed in a shocking manner.

"Holy pilgrims!" exclaims the hunter, "the poor chap got his game, but not quick enough. One bullet won't do for a grizzly. Why didn't he shoot him up more?"

He picks up the rifle, a repeater, and as he gazes at it, a look of anger and disgust spreads over his face. A shell is tightly wedged in the action, rendering the weapon absolutely useless. With an imprecation, he raises the rifle above his head, then hurls it far down among the rocks. It is not a Winchester or a Savage; it is the other kind.



'WITH NINE INDIANS CLOSE BEHIND THEM, YELLING LIKE DEMONS."

HOW WE LOST OUR MULES.

NELSON YARNALL.

After the Phil Kearney massacre, and the treaty of our government with the Sioux Indians, under which Forts Phil Kearney and C. F. Smith were abandoned, the mules from those posts were sent to Fort Laramie and turned over to the quartermaster there to be foraged through the winter. When Laramie received its allotment for forage no allowance was made for animals from other posts. As hay and grain could not be had so late in the season, it was thought best to place the mules in charge of competent employees, and send them out to be herded on the grass for the winter or until forage could be brought out from the Missouri river.

Accordingly the mules were placed in charge of a man named Daniel McCall, who chose from the post employees a competent cook, one teamster, 2 day herders and 2 night watchmen, a Mr. Smith and me being employed for this duty. We prepared to make ourselves as comfortable as possible, drawing from the quartermaster good tents, axes and clothing; from the commissary a liberal supply of provisions, and from the ordnance department good guns and ammunition. The mules were counted and receipted for by Mr. McCall, and we started for the grazing grounds on the Laramie river, about 20 miles from Fort Laramie in a Westerly direction.

There were something over 100 animals. They were poor; but although the weather was cold, it being midwinter, the grass was so plentiful on the range that in a short time they had gained in flesh wonderfully, and when turned out of the corral would run and play like colts. It was surprising to see so great a change in so short a time, as well as amusing to watch them in their playful moods.

The place chosen for our camp was in a beautiful grove of cottonwood trees, which, beside affording excellent shelter from the cold winds, furnished an abundance of good fuel and material for a corral. This we made by felling trees in a circle.

After our tents were pitched and everything prepared for the remainder of the winter we congratulated ourselves on the good time we would have. Antelope and deer were plentiful, and a good supply of meat for our camp, with an occasional choice cut for the commanding officer and the quartermaster, was almost a sure thing, we thought.

On the North and South sides of the river were low, broken hills, with coulees coming into the river at short intervals. This broken, hilly country terminated on the South side about a mile to the East of our camp, and a comparatively level plateau extended thence Eastward 4 or 5 miles, making an ideal place to hunt antelope. The rough, hilly country to the Westward of this plateau afforded an excellent hunting ground for deer of both kinds. It was also an excellent hiding place for Indians, as we soon learned.

It was my custom to retire at sunrise and sleep until our noonday meal was ready. Then, if not rested, I would retire again in the afternoon.

One fine day, after I had eaten my dinner, I shouldered my gun and went after a deer. I had not gone far, however, when I saw fresh moccasin tracks. I immediately returned and reported what I had seen to Mr. McCall, but he thought the tracks might have been made by some of the coffee coolers from the post, who might be out hunting. I argued that the coffee coolers would not hunt in our vicinity without visiting our camp.

The matter was dropped, however, and nothing more thought of it for a short time. We had enjoyed, for a month perhaps, the pleasant time we were foolish enough to anticipate, when one morning while Mr. McCall and party, excepting one day herder, the cook and me, were absent at the post for the purpose of renewing our supply of provisions, a stalwart Sioux Indian appeared in our camp. I had turned the mules over to the day herder and had retired to try to make up some of the sleep I had lost the previous night. The cook was busy baking a Dutch oven full of fat deer's ribs, and I had just gone to sleep when the cook's head appeared in my tent, and in a voice which I thought sounded a little shaky he said,

"Yarnall, for God's sake, get up; there's an Indian in camp and I can't make out what he wants."

"Perhaps he smelled the meat you are cooking and came in to have a feast," I answered.

I knew the sign language, and as I was the only man in camp who could talk with an Indian, I dressed and walked out to the camp fire, where the Indian was sitting, eyeing our oven of meat. I waited some minutes for him to open the conversation, but as he showed no inclination to begin. I asked him, in the sign language, where he was going and what he wanted.

He replied, in what seemed to me the easiest and most graceful signs I had ever seen, that he was on his way to the Cache La Poudre, to visit friends.

I asked him if he was alone. He replied that he was, and added that he had come a long way; that he had no meat, and was very hungry. I told the cook I thought the Indian lied; that it was my opinion he was in our camp as a spy, and might soon return in a very different manner. All of which I now believe the Indian fully understood. I had some other conversation with him about hunting buffalo, going to war, etc., after which the cook gave him his breakfast.

After eating what seemed to me enough to satisfy 2 hungry men, the Indian mounted his pony and rode away, but in the opposite direction from the Cache La Poudre. This greatly increased our fears for our safety. The cook, especially, was greatly frightened, and I imagined I could see his knees tremble.

I again retired, after sending word by the cook to the day herder to be on the alert, and by no means to allow the mules to wander too far from camp. I could not sleep, however, and soon arising, suggested to the cook that we would best fortify ourselves, as I fully believed we would be attacked. We accordingly piled logs around our tents, which afforded fair protection from any possible attack. My gun was an old Spencer carbine, of 50 or 52 caliber, and when fired the ball traveled so slowly that at a few hundred yards an Indian would have plenty of time to dodge the ball if he should see the smoke from the gun when fired. On one occasion I fired it, at a distance of 600 yards, at a band of antelope, and on watching them some seconds after firing, was surprised to see 2 of them tumble over. I proposed to exchange guns with the cook, his being a modern Springfield, but he would not hear of it.

On the following morning, after giving the day herder instructions and turning the mules out of the corral, I had just retired to my tent and rolled myself in my blankets when I heard the clatter of a horse's hoofs on the frozen ground, and the voice of the herder exclaiming, in the highest accent possible,

'In-di-ans! In-di-ans! ! In-di-ans! ! !"

I leaped out at once, but was only in time to see the herd disappearing over the crest of the hill, with 9 Indians close behind them, yelling like demons and shaking their blankets at the frightened animals. If it had been amusing to see them kick and play, at times, it was much more than amusing to see how quickly they climbed the hills and disappeared. I would not have believed it possible for a mule to run so fast had I not seen the stampede with my own eyes.

There were left standing around the corral, enjoying the morning sun, a number of mules, 2 of which we secured as quickly as possible. Neither the cook nor I had a saddle, but we mounted hastily and all 3 of us started in pursuit. It was a foolish thing to do, but we felt the loss of our charge so keenly that I believe had we not been fortunate enough to secure a mount we would have started after the redskins on foot.

We urged our mounts forward as fast as they could go, anxious to come up with the Indians, but of course were unable to do so. We followed the trail until after noon, when, seeing the hopelessness of further pursuit, we returned, reaching our camp at one o'clock at night, about as sore and as tired a trio as could be found anywhere. I have since often thought how fortunate for us that we were unable to come up with the Indians.

On our return we attempted to withdraw poisoned arrows from 6 mules that had given out and had been wounded by the Indians; but we were unable to do so, as the arrow points were too firmly imbedded in the flesh. The poor mules afterward died of their poisoned wounds. Two of them tried to get back to camp, but were too weak to do so and died on the way.

After preparing a hasty meal we all retired, and it seemed to me I had just gone to sleep when I was awakened by the familiar voice of McCall, who, in decidedly unpleasant language and accent, demanded of me the whereabouts of the mules. It transpired that while we were in pursuit of the Indians, McCall and party had returned. Finding the mules and us gone, they naturally supposed we had run away with our charge. Hastening to the post they had reported the matter and had returned with a party to follow us.

After explaining to McCall the true situation, and that we were not the guilty parties, we were informed we must take the trail again.

This time we were furnished saddles, by 2 of McCall's party remaining in camp, and, mounted on animals that had only been ridden 20 miles, we again started in pursuit. The Indians then had 24 hours the start of us, and our chance of coming up with them, without a change of horses, was a hopeless one. We pushed along, however, until after nightfall, when we came to a small stream, a tributary of Horse creek, Southeast of Fort Laramie. There we halted for the night. After unsaddling we found the little stream was frozen entirely dry at that place, and we were unable to get water for the horses. We managed to get a drink ourselves by melting snow. There was no timber along this stream, and as the weather was very cold, the only way we could keep from freezing was by dividing our party into reliefs, keeping one man at work gathering the little willows that grew along the stream and adding them to the fire.

I managed to get a little sleep during the night by rolling myself in my overcoat and lying near the fire; and what sweet sleep it was! I shall never forget how hard it was to arouse myself when called to do my half hour's gathering of willows.

At the first peep of day we were in the saddle and following the trail, which then bore a little North of East. At about 10 o'clock we came to the main stream of Horse creek. There we halted long enough to water our thirsty animals and to prepare a cup of coffee. This, with a few pieces of dried buffalo meat the Indians had lost and I had picked up, and some hard bread, made a meal we greatly enjoyed.

After eating our scanty breakfast we mounted and again took up the trail, which then bore still more to the North. About loaded with logs, such as are commonly used in the West in building houses. We wondered how their owners could have escaped, as they were in advance of the Indians and directly on the trail. Our fears were soon confirmed, for on approaching the wagons we found the harness cut to pieces, and the bodies of 2 men near. They had been scalped and horribly mutilated. One of the men was bald, but had a light growth of hair around the lower part of the head, which the Indians took as a scalp. It has been asserted that an Indian warrior will not take the scalp of a bald person, but in this case they appropriated what little hair remained on the poor unfortunate man's head.

We found an axe near one of the wagons, with which we cut the frozen earth and buried the bodies as well as we could. The men had been hauling logs to build a road ranch on the North Platte river, near Scott's Bluffs; but there was no clue to their names, as the Indians had taken every vestige of their clothing.

We followed the trail until nearly sunset, when we came to the North Platte river. There we found the Indians had crossed and were evidently so far ahead of us it would be impossible to overtake them with our jaded animals; so we gave up the chase and turned toward Fort Laramie. We camped at the Cold Spring ranch that night, and on the following day rode in to the post.

I have lately been looking over the history of Sitting Bull, and find that one of his most daring feats was to "run off a whole herd of mules." In all probability the herd of mules he ran off was our charge.

AMATEUR PHOTO BY E. A. NORWOOD.

SNOWSHOEING ON MOOSEHEAD LAKE.

AMATEUR PHOTO BY D. H. DARLING.

THROUGH FOREST AISLES.

See page 32

AMATEUR PHOTO BY D. H. DARLING

KNEE DEEP IN JANUARY.

See page 32

THE TRUE STORY OF DADDY BINKS.

ERNEST T. SETON.

Poor old Daddy Binks kept a corner grocery in a back street of Portcoma, in the State of Washegon. As a boy 40 years ago in Pennsyland he had been fond of an occasional shoot, and once or twice after he went West he had had a lovely time, killing 6 ringtail pigeons with his own hands, on the most glorious of these occasions. That was the crowning exploit of his life. But alas! it was 35 years ago, and never once from that day to this had his lot been anywhere but among the grocery boxes, working from dawn till nearly midnight to do his duty by his family. An apparently interminable task, for the family didn't seem to know when to stop coming, and had already transgressed the traditional limit of the baker's dozen.

But Daddy Binks was a cheerful soul. He stuck to his job, and buoyed his spirits continually with promise of a day's shooting some time. This long deferred hope grew first into the daring ambition of his life; then, after years of waiting, it became too good to be true, and was glorified into an iridescent but impossible dream of Paradise. Sometimes in the 5 minutes smoking time that Daddy allowed himself after dinner, he would indulge in a little day dream and see himself out again with a gun, a real *shooting gun!* as when a free, wild boy. Sometimes he went a little farther and pictured himself proudly arriving home with 6 or even 7 ringtail pigeons in his hand, while all the neighbors would crowd around and hooray and join in his triumph; for everybody without exception loved dear, harmless old Daddy Binks.

For 35 years he had been in this hopeful state of mind, when an unexpected, an almost impossible, combine of good luck not only put it in his power to go hunting but actually forced it on him.

At first the idea of really going was something of a shock; but when he saw the gun his friend loaned him and pored over the map of the duck grounds his enthusiasm soon reached the old time fever heat.

All in due course he reached the grounds. Again luck was with him. He came on a wonderful flight of mallards, and Daddy blazed and blazed. The ducks kept falling, falling, and Daddy grew younger with every shot till he got away back long before the years of discretion, and in a perfect delirium of joy. Oh, the ecstacy of that day! Seventy big fat mallards, when a ringtail pigeon would have set his cup a-brimming!

Oh, the glory of that return home, that march up the main street of Portcoma, with all the neighbors rejoicing in his joy! Cæsar? Alexander? Dewey? Pah! not for a moment! They never had such a draft of unmitigated happiness. It would be his last, probably, but what of that! Here was enough for a lifetime.

Next morning the Portcoma Blaatter came out with full particulars and old Daddy began positively to swell and feel himself an important member of the community. Within the next day or 2 he was posing as an authority on ducking and recommending this gun, that powder and such a boat with the air of an expert. In each case, of course, it was the article he had used on his one duck hunt.

It is wonderful how the fame of the great spreads. One morning there came to Daddy Binks' grocery store a letter from a great editor, 4,000 miles away. It was a polite, almost deferential, note, stating that according to the Portcoma Blaatter he, Mr. Binks, had on such a day killed 70 mallards with his own gun. Was it true?

Daddy swelled with pride to see how his fame had rolled from ocean to ocean. He at once wrote the editor a full account on the back of an old invoice. It was not only true, it was less than the truth, for 5 more mallards had been winged and were subsequently secured! (They were really contributed by deceitful friends, who wished to swell Daddy's bag and happiness, so the old groceryman could claim a one day bag of 75 mallards.) A record surely!

For one short month his joy was complete. Then there came to his happy home a marked copy of a great sportsmen's magazine and Daddy's eye soon lit on this item:

THAT NOTORIOUS PORTCOMA GAME HOG.

D. Binks, the notorious game hog, has outraged the feelings of every decent citizen by a shameful slaughter of ducks. He not only admits, but brags, of having killed 75 mallards in one day.

Poor, harmless, old Daddy Binks! Seventy-five ducks in 35 years; 2 ducks per annum! He was dumbfounded by the exposure. His shame had gone farther than his fame. Publicly denounced and held up as the vilest of the vile, he was utterly crushed. The first blow was terrible in its unjustness. He had not buoyancy enough, self-assertion enough, to recover. But his friends rallied round him. The Blaatter came out with a stinging retort, that the Eastern editor never saw. It did old Daddy some good, but could not reinstate him. The old man was forever shut up on the subject of ducking. The last light of his dull, grocerman life was quenched, and he went his way as before, but everyone could see he was a changed man. He was carrying a load that could not be talked away. No wonder his friend who lent him the gun swore.

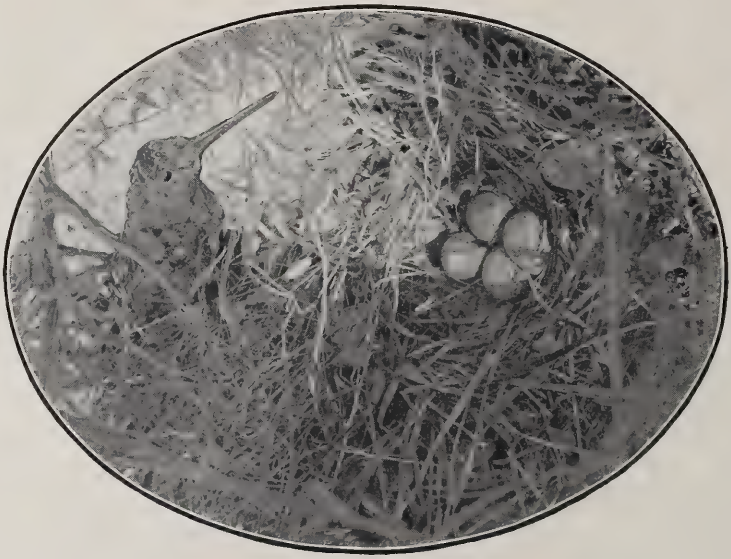
"I'd rather 1,000 real game hogs should go unscorched than to see a nice, harmless, old man like that all broken up with an unjust roast! If I ever get a chance I'll—"

He didn't say what, but all the town knew and said they would, too.

MADAME WOODCOCK AT HOME.

HOMER G. GOSNEY.

I send you herewith a photo of a mother woodcock and her nest. She is still here, and nothing would please me more than to take you to her nest and give you a chance to look at her. I don't bother her much, for I should like to get another shot at her and the chicks, after they come out. That, however, would be a hard negative to get, for they fly when they are no larger than bumble bees.


AMATEUR PHOTO BY HOMER P GOSNEY.

Please enter this picture in your contest. It was taken with a Premo B 4x5; Eastman extra rapid plate, with telephoto attachment. Developed with weak pyro. Exposure, 4 seconds, wide open lens. Camera about 5 feet from nest. The position of the nest made it hard to photograph, and the set of the tripod legs threw the camera in such a position that the bird looks higher than her nest, while she is just opposite and on a level with it. In photographing the nest I threw my focusing cloth over a few twigs to prevent the sun from shining on them when the exposure was made.

If amateurs would quit their random shooting at commonplace subjects, go into the woods, study the birds and cultivate them they would find this work more interesting and profitable. When the birds learn you bear them no harm you will be surprised to see how tame they become, and you will find more material to work on than you had ever dreamed of. Don't try to photograph birds with a fixed focus lens. A long focus is much better. Don't take anyone with you. Go alone and make as little noise as possible.

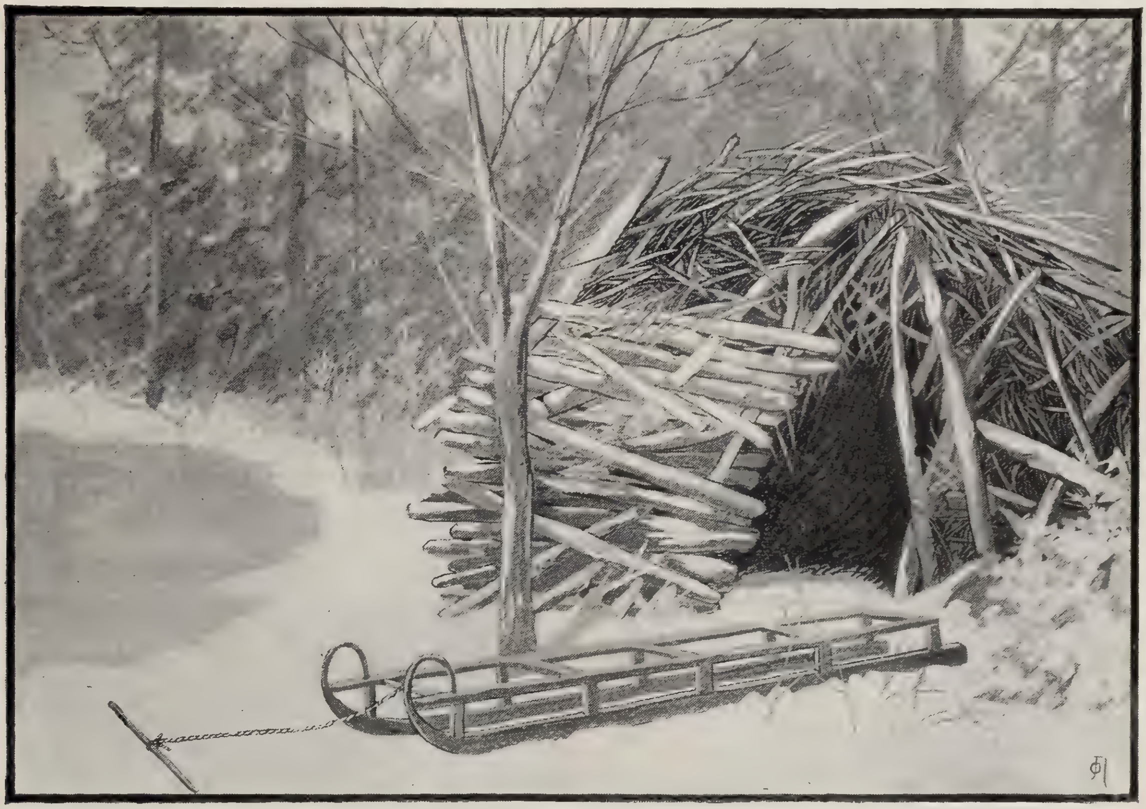
A WINTER CRUISE IN NORTHERN MAINE.

CARROLL BARKER.

In March, 1892, after the coldest days of a long, cold winter had passed, my father and I decided we had time enough before sugar making to go into the woods to some of the large ponds near the Canadian line for a week's fishing for trout and togue, and perhaps to get a few pounds of spruce gum. When we had set the time I put on my snow shoes and went across lots to the neighboring town of L., where my chum lived. I found him ready and willing to go with us. I told him to take snow shoes, a gum picker, an ice chisel and some fishing lines, and we would furnish everything else.

We were ready to start the next morning at 4.30. My father had 2 horses hitched to a straight sled, 12 feet long, boarded around the sides to hold the various articles on. We had snow shoes, a Winchester rifle, ice chisels, and a moose sled, blankets, and provisions to last a week. Four miles were through an evergreen swamp, impassable in summer. The thousands of small spruce trees, rich, dark green, against the snow, were extremely beautiful.

About 9 o'clock we reached Sam Parsons' farm, where we left our horses and sled. We then packed our provisions and blankets on the moose sled, put on our snow shoes, and began a 6-mile tramp over Carry mountain to Big Carry pond. We followed an old snow shoe track, made while the snow was thawing. On such a track the snow packs down, so that when it freezes it makes good traveling. After many mishaps and falls we reached the pond. There we found an old camp built by togue fishermen several years before. We cleared out the snow that had drifted in, prepared firewood and cut a hole through the ice for drinking water. When that was done it was nearly dark. Parker went to a small cove and cut a few holes that night. When he came back he had a beautiful togue that weighed 3½ pounds. We fried it for supper and ate it from pieces of birch bark. At 9 o'clock we turned in.



OUR MOOSE SLED.

In the morning I was the first one up, and went to the pond to try my luck before breakfast. I caught 3 togue, which I carried to camp and we fried them for breakfast. All that forenoon we cut holes and set lines. It was rather slow work, for the ice was 3 feet thick. At noon we had about 50 holes cut, and had caught perhaps 12 togue and one square-tailed trout. After noon, leaving Parker to watch the lines, Father and I went to the Middle Carry. We did not catch any togue there, but got about 50 small brook trout in 2 hours.

While we were there an old trapper came across the pond to us. He showed us a fine otter skin and 3 beaver skins he had taken from his traps. He said he and his partner, Sam, had been trapping in the woods around there for 20 years. He opened a meal bag that he had strung over his shoulder and showed us about 50 trout, which he was taking home to his family, but they were much larger than any we had caught. He said the pond was the head of the Middle Carry and had not been much fished. In the summer it was so marshy fisherman could not get to it, and few knew where it was. As he left the pond he remarked that we could not catch fish after 12 o'clock. We laughed at him, but not a trout could we catch after noon. The reason I do not know; but it did not matter, as we had all the trout we wanted to carry, 192 in all. I think the lot would have weighed 75 pounds. About 3 o'clock we started for the camp at the Big Carry. My face was so sore that every little twig and branch that hit it cut through the skin. At length we arrived in camp, tired but happy.

Next morning we took in our lines in the big pond and found a few togue on them; also that somebody had taken 20 of the lines while we were away. The thief had come on to the pond from the Middle Carry and had gone back the same way. It was no use to look any farther.

Parker and I picked gum the rest of the day while Father stayed in camp. We got 4 or 5 pounds, of poor quality. During the night it rained, and froze enough to make the snow shoeing good. In 2 hours we were back to our team and ready to drive home.

REVERIES.

ARTHUR HAZLETON.

When the winter storms are howling,
  And the snow is drifting deep;
When the fields are bleak and barren,
  And all nature seems asleep;

Then I love at eve to linger
  By the fireside's genial glow,
Dreaming of the scenes of summer,
  Sylvan scenes where rivers flow.

And again I roam, in fancy,
  In the woods, where squirrels play,
Or by sparkling streamlets wander,
  Fishing all the livelong day.

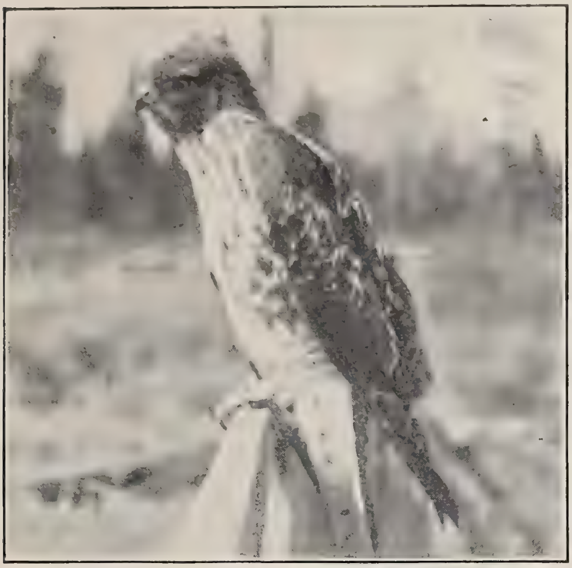
Then I take my rod and tackle,
  Fondly look them o'er and o'er,
As I hear the water plashing
  On a lake's enchanted shore.

Oh, sweet mem'ries! Dream of summer!
  How they fill my heart with cheer!
Round me float the balmy breezes,
  Though 'tis winter, cold and drear.

First Member: Don't you think we should read a book that will do us good?

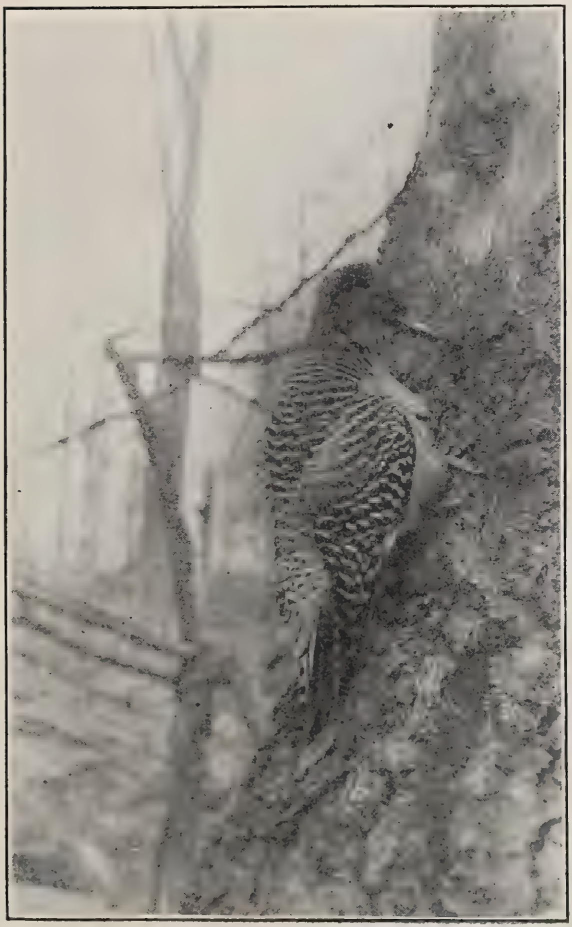
Second Member: But how can we? We must be up to date, you know, and there hasn't been anything published for years that will do us any good.—Judge.

FOUR GOOD CAMERA SHOTS.



NAME OF PHOTOGRAPHER UNKNOWN.

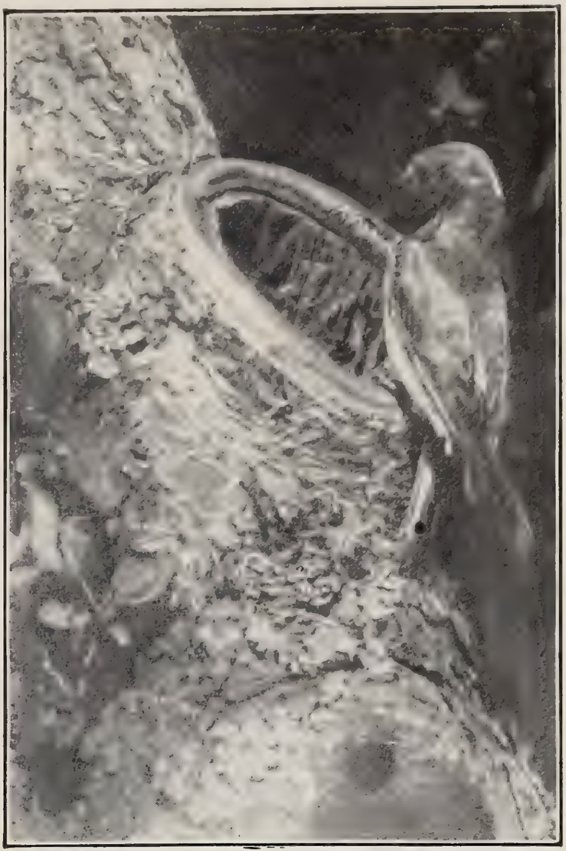
RED TAILED HAWK. (*Buteo Borealis*)



AMATEUR PHOTO BY ANDREW EMERINE.

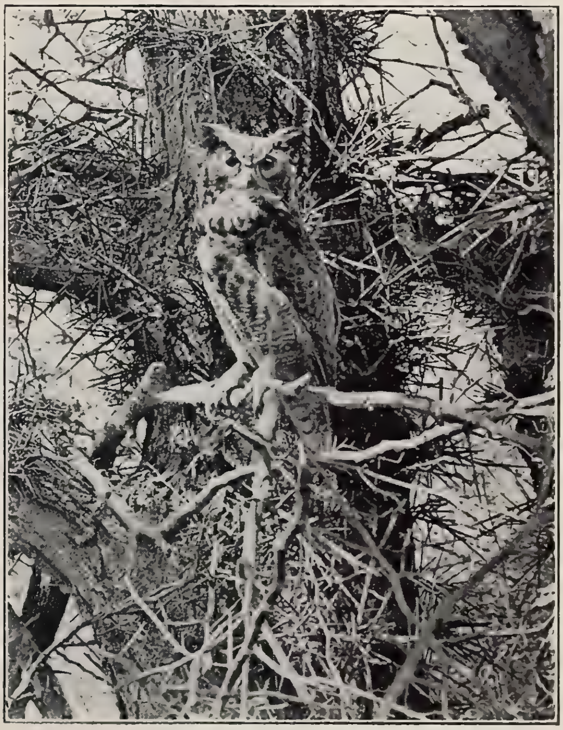
A PORTRAIT.

Highly commended in RECREATION'S Fifth Annual Photo Competition.



AMATEUR PHOTO BY CHAS. A. REED

BLUE BIRD ENTERING ITS NEST.



AMATEUR PHOTO BY J. B. BROKAW.

HORNED OWL.

Highly commended in RECREATION'S Fifth Annual Photo Competition. Made with Eastman No. 4 Cartridge.

A STRANGE INCIDENT

W. H. NELSON.

Yesterday, as "twilight was deepening with a tinge of eve," I sat in my den idly poring over an old war book, dreaming for the thousandth time the fiery dramas of 40 years ago, when through my open window was thrust a head from which issued a voice:

"Nelson! Come out here, quick! I've something great to show you."

It was my friend, Mr. Freet, sportsman, friend of Recreation, and gentleman. He was evidently in a state, and as we hurried out together he reiterated:

"It's great! Something for Recreation." Presently he said in calmer mood, "A flock of quails in one of the trees, right here in the heart of the city. They are calling. Listen!"

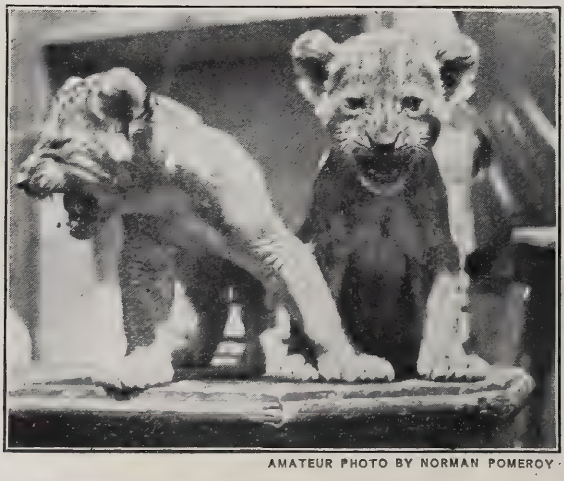
Just then, from the tree he indicated, out against the sky they launched themselves, flying over the houses, going Westward, in the direction of the White House, 6 of them. They flew well above the housetops, and in a moment disappeared. How came they to visit the city? Was it to present a petition to "Teddy" for protection against the game hog? We have read in Recreation of eagles, hawks and wild geese dropping into the streets of cities, and I have known, personally, of deer passing through a Colorado town, and of a cinnamon bear being killed in the heart of a mountain town in the West; but to have a covey of quails fly into the heart of a great Eastern city coppers my king.

The street lamps were lighted and electric globes were shimmering everywhere. Was it, to them, the dawn of a new day? Had the lights bewildered them?

Mr. Freet and I stood and watched them disappear toward the West, and pitied them heartily. They seemed so small and helpless, so friendless and so persecuted. In all this great city there were, perhaps, not 100 men who, seeing them, would not have thirsted for their blood. From the bottom of my heart I rejoiced to hear Freet say, "Poor little fugitives! I hope they'll reach safety"; but I realized that with their limited powers of flight they would perhaps fall long before they could pass the thronging dangers, and then, in the merciless hearts of men they would meet short shrift.

Perchance "He who careth for the sparrows that not one of them fall to the ground" neglected may have guided them to shelter and safety. I hope so.

I am glad to find in Mr. Freet a true disciple of the new gospel of game protection. He has been, from its infancy, a constant, enthusiastic reader of Recreation, and is an energetic, persistent apostle of decency in the field; has sent in numerous lists of subscribers, and on all occasions preaches the New Covenant of the L. A. S. Where one so often comes in contact with bristles it is a pleasure, now and then, to meet a man whose skin is smooth.



AMATEUR PHOTO BY NORMAN POMEROY JR.

WE WANT OUR BRE-E-E-A-A-A-K-FAST.

WILL A BULL MOOSE FIGHT?

DR. A. C. SHOEMAKER.

I have several times noticed, in RECREATION, accounts of bull moose showing fight. I have also heard lumbermen tell of being treed by angry moose that disputed their right of way in the woods.

As bearing on the point, I will narrate my experience last fall on the head waters of the Little Tobique, at Nictan lake, New Brunswick.

A friend and I were there 4 weeks, hunting moose and caribou. My friend got a moose the morning after our arrival, but I was not so fortunate. One morning my guide, Dave Cremin, was paddling me up the lake, keeping about 50 yards from shore. We heard a sudden crash in the brush. The noise lasted but an instant. Dave sounded a call on a moose horn. There was no reply. The call was repeated, and immediately we heard something coming with a rush as if to land on top of us. The animal stopped near the water's edge, hidden by the brush. The guide took the moose horn and by gently splashing in the water produced sounds exactly like those made by a large animal while wading. That was more than the bull could stand. He left the cover and walked 50 or 60 feet into the water, coming within 75 yards of the canoe. After a long look at us he turned and went back to shore, where we heard him grunting loudly. He came out again, a little farther up the lake, and looked us over once more. Then he made off toward the hills, occasionally giving an angry grunt, as if he resented the awakening from his dream of love. I did not shoot at him because he was an undersized animal with small, nubby horns.

Every morning and evening for a week we paddled around the lake without seeing another bull, although there were always 2 or 3 cows feeding in the inlet.

At last the guide proposed we go to Foster's caribou holes—a chain of small, deadwater ponds, 6 or 7 miles from Nictan camp. Accordingly we packed a small shelter tent, sleeping bags and provisions for several days, and started. Arriving where we were to camp, we left our packs and went quietly to the water holes. There was no moose in sight, though one had evidently just left, as the water was soiled and there were fresh tracks. For the remainder of the day, while Dave put the camp in order, I watched that hole faithfully. The next morning I was there before light, but not even a cow moose put in an appearance. Late in the day we went the length of the deadwater; there were plenty of signs, but nothing else.

About 7:30 that evening, just as the full moon rose over the ridge behind us, we heard a moose calling. The sound came from the direction of the water holes, ¼ mile away. While we were arguing whether to go there or not, the call was repeated loudly. In a few minutes we heard the long, weird, plaintive call of a cow moose, which was at once answered by the bull.

I immediately took my rifle, and telling Dave to follow, went in the direction of the sounds. I thought that by going quietly along the deadwater we might get near enough to the bull to obtain a fair shot in the bright moonlight. When we got in the woods, however, it was so dark we could keep on the trail only by feeling for the blaze marks on the trees. In that way we stumbled along, sometimes on the trail, but more often off, until we came within 200 yards of Foster's pond. There we heard something coming toward us. The guide was beside a big spruce and at once stepped behind it. I remained perfectly still, standing in the trail.

Presently a dark object appeared on the trail and stopped about 60 feet from me. I took a step toward the guide to ask if he thought it was a cow or a bull. When I moved, the animal disappeared to one side of the trail, but its place was immediately taken by another. That was surely a bull, as we could distinguish the horns when he put his nose to the ground and raised it again. I wanted to shoot, but the guide told me to wait; he was apparently more interested in the actions of the animals than in my shooting. Finally he said, "Let him have it!" I threw the gun to my face and fired.

Almost before I heard the report I saw the moose coming at me like a rocket. If the brute had been as large as he looked to me then, he would be the record breaker of the century. With ready courtesy I tried to step aside and let him pass. My foot caught, I fell, and the animal went directly over me. In an instant I was up again and shooting, and had knocked him down. "Come on," cried Dave, "and finish him!" Before we got near, the moose was up and off. Again I fired and knocked him down, only to have him spring up and run. I put another bullet in him and down he went the third time. That left me but 2 more cartridges. We were almost to the moose, when once more he got up and ran. I fired my remaining shots at him, but did not think either took effect. By that time the guide was dancing like a madman and swearing like a pirate, while I stood with an empty gun, calling myself a fool for having left camp with only 5 shells.

Dave wanted to follow the animal, but I could not see what we stood to gain by that, our only available weapon being a small hunting knife. I knew the moose was badly wounded, and, if not disturbed, would not go far. We decided to return to camp and take up the trail in the morning.

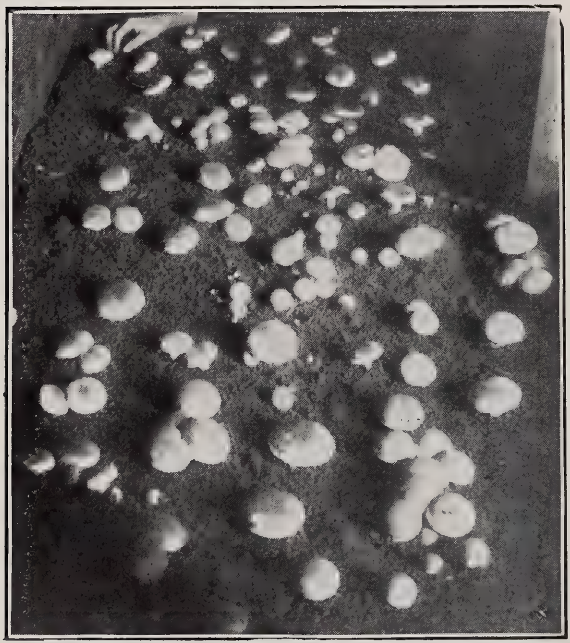
Neither of us slept much that night. I did fall in a doze and was dreaming that a big moose was carrying me off on a marvelous rack of horns. What became of me I don't know, for Dave called me to breakfast. By the time that was finished it was light enough to travel. We had no difficulty in picking up the trail, and, within 50 yards of where he went down the third time, we found the moose, stretched at full length, and dead. He had run in all about 150 yards after I first fired, but it was in a circle, and he lay within 60 paces of where we first saw him.

One shot had hit the point of his shoulder, smashing it to pieces; 2 had entered the hips, reaching the lungs; and another had struck back of the shoulder, going through and badly tearing the lungs. Evidently he had run until he fell dead. I used a .303 caliber Savage.

Now what I should like to know is this: Did the moose charge down the trail with the intention of attacking, and knowing what he was up against?

A MUSHROOM BED.

In July Recreation was an account of some person at Akron growing mushrooms. You printed also a photo of the beds. Thinking another picture of mushrooms might be interesting I mail you a photo of the mushroom bed in our cellar. We have mushrooms for ourselves every day in the year. The accompanying photo shows how they look now, and is an amateur picture taken by my father, Dr. J. W. Marshall.



AMATEUR PHOTO BY DR. J. W. MARSHALL.

V. C. Marshall,
Owen Sound, Ont.

THEY WILL RETURN.

REV. F. C. COWPER.

The days of the hunt are past and done,
  The fun and the frolic are over;
I lounge by the fire; high hangs my gun,
  While curled on the hearth sleeps Rover.

The crack of the log gives cheer to me,
  I care not for blasts that are blowing:
The smoke of my pipe floats lazily;
  I stare at the embers glowing.

Ho! Rover! Heigh! Rover! What's that?
  What troubles are wove with your dreaming?
You quiver, you whine, my good hound pup;
  The scent must be lost, to all seeming.

I, too, have regrets of hunting days,
  Though the pelts swing thick from the rafter;
But the winsome weed my grief allays,
  And I shed only tears of laughter.

The winter will wane, the months slip by
  Of the meadow hay and the clover;
Then, ho! to the mountains will I fly,
  With my gun, my pouch, and my Rover!

Professor: If a person in good health, but who imagined himself sick, should send for you, what would you do?

Medical Student: Give him something to make him sick, and then administer an antidote.

"Don't waste any more time here; hang out your shingle."—New York Weekly.

HUNTING IN THE ARCTIC ROCKIES.

A. J. STONE.

I left Fort Norman in July with my white man, 2 Indians, Donnel and Clise, and some dogs, for pack animals, bound for the mountains North and West of the Fort. We traveled 50 miles down the McKenzie in a large birch bark canoe before starting on our march across the muskeags for the mountains.

A strong head wind was blowing when we started, and soon increased to such a gale as to cover the river with whitecaps and drive us ashore, where for 48 hours we were storm bound. This was an unwelcome incident, because we had but scant store of provisions.

However, at length wind and river calmed, and we paddled all day and late into the night, only putting to shore to make tea. At 1 a. m. we reached the point where we were to land and begin our march, a 3 days' job for the natives. A 2 hours' nap and we were off for our trip to the mountains. Notwithstanding the leanness of our larder, our packs were quite heavy. What with camera and plates, traps for small mammals, 65 pounds of salt for curing large skins, piles of moccasins, cooking outfit, canvas for shelter, changes of clothing, guns and ammunition, we sank to the knees at every step.

I was determined if possible to beat the "2 sleeps," 3 days' record, knowing full well what I should be obliged to endure on that trail. And such a trail! Many times it faded utterly, and my Indians were forced to put down their packs and search for it.

Leaving the river, we passed first through a fringe of small spruce, ½ mile wide, and then plunged into a dreary, monotonous, desolate, moss covered waste, never steady on foot till we reached the mountains. One is never certain of his footing. One moment he feels solid, then down he goes; again he fancies he is about to step into a hole and careens his body accordingly, only to step on a concealed stick and rise instead of sinking.

Willow and scrub spread everywhere. The scrub lies athwart your path, the willows interlock. Whatever direction you take, everywhere are moss hummocks and pools. I often wondered at my endurance. Small black flies and mosquitoes swarmed everywhere. I was their meat. They were tired of Indian blood. The white man with me had grown up in the country and was nothing new to them. I was a delicate morsel, and on me they fastened. For a while I fought them, but it was no use. They were too many, and to wear a head net was impossible in that brush. I had but one hope, the mountains; and toward them I strained, panting and sweating from exertion.

Before reaching the mountains we skirted a number of small, circular lakes. Not many of them contained fish, but ducks and loons with their young were abundant. The water, which we had to wade, was often very cold, as it rested on a solid bed of ice, and our feet and legs would become numb as if paralyzed.

After one night's sleep on a corduroy bed made of brush, the second afternoon we came to an extensive field of sand. Beyond that, a mile off, rose the abrupt mountains, and at no great distance I could see a deep, rugged canyon piercing the range. That was the Carcajo river. Debouching from the mountains, it spreads, in times of freshet, over the flats a mile wide. A soft breeze blew across the sandy waste on which we had entered, and as we proceeded we struck a current of cold air, which cleared away our tormentors. Relief! U-m-m-m! Until one has endured the tortures inflicted by the insect pests which swarm here he can form no idea of the sufferings they produce. My eyelids were swollen into great rolls; my hands, face and ears were raw.

Leaving our comfortable sand plain, we soon reached and crossed, in succession, several branches of the Carcajo, and presently came to the main stream. The Indians reported it very low and we stripped and waded it. The current was rapid, probably 10 miles an hour. Our method of making the passage was of Indian invention and was as follows: A long pole was found, and each clung to it as we waded in abreast. In that way the upper man broke the current and the others supported him. The water was not very cold, and I took occasion to lave my poisoned flesh in the cooling stream. We camped at the foot of the mountain where the unchained river breaks from its granite prison and rushes to the plain. Latitude 65° 45′ N.

Gazing along the high walls of the canyon I discovered a moving speck of white, which under the glass proved to be a sheep. Another and another! Already game in sight! Had I possessed wings it would not have been far to them, but as I must travel on foot the journey was long and the way difficult, so I turned in for a night of comfort and rest.

Next morning we climbed over a difficult ascent for 2,500 feet, when the country broke off into a succession of ridges and buttes, like the bad lands of Dakota. Farther on a series of higher ridges with little muskeags between, and at least a higher and still more rugged country. There, in a canyon, provided with scrub, we made camp, believing that would be our headquarters during our hunt.

Next day 3 sheep were killed. The first was lost over a precipice. The second and third we got. The 2 following days we drew blanks. Thereafter I organized side trips. The first, of 4 days, only brought us one specimen, but the second, of 8 days, resulted in 10 good catches. Then a long period of hard luck; then better fortune.

That was no pot hunters' paradise. Animals were scarce and wild, yet persistent effort filled our main camp with specimens, clean and perfect, with all the bones necessary, and all properly tagged and tied up in bundles. In one direction only our efforts were fruitless. I could procure no caribou. In late fall and winter they go into that country, but not in the summer. During that season they range far back in the rugged recesses of the mountains. I made a strenuous effort to reach them and marched straight toward the heart of the mountains for 2 days, crossing a stream which nearly wound up our earthly affairs. We plunged in just above a roaring cataract and though we plied our accustomed tactics of pole and line, we were almost borne off our feet 100 times. When we finally reached land I lectured the fellows heartily for rushing so hastily into danger. The second evening we reached a stream that we could not cross, and, reluctantly abandoning our quest, returned to main camp.

There I discovered that I was suffering from blood poisoning. My hands were swollen and covered with painful ulcers. To carry all our specimens on our backs was impossible, so we decided to construct a *cache* on the Carcajo, where dog sledges could reach them in winter. We set about the task at once, building it on a level bed of rock above high water mark. We carefully arranged the specimens inside so as to admit air, covered them with canvas and oiled duck to keep them dry, and above all that put a double layer of timbers, piling stones around and above the whole.

My hands grew worse; the disease was spreading to other parts of my body, and I found it necessary to hasten back to the Fort. Despite my condition, I was in excellent shape for travel, and during the long, arduous journey across the muskeag I did not once feel fatigue. For nearly 40 days I had subsisted on sheep alone, yet I experienced no ill consequences. The quantity of fresh meat, if fat and tender, which I could consume was wonderful. A fat rib from an adult male nicely roasted before a camp fire is a sweet, refreshing morsel, though a round of sucking doe is not quite so palatable. The flesh of the lamb is insipid. The brains and tongues all fell to me and were good.

* * * * * *

Strikingly noticeable in the mountains is the absence of flowering plants. Only a few varieties were seen.

Not a single field of snow was crossed and there was no snowfall while we were in the mountains, but soon after leaving them we could see them clothed in white. The weather was fine; only a few cold rains fell, and now and then a thunder shower visited us. But smoke and fog at all times obscured the view and prevented me from securing photographic scenes.

Neither grouse nor ptarmigan were met. We sighted one caribou, the only animal beside sheep seen on the whole trip.

The muskeag is fairly well stocked with moose. Black bears are also found there; wolverines, marten, lynx and beaver along the small streams and in the lakes. A few grizzlies are found in the mountains. Caribou are abundant in some places, but just what kind I am unable to say. I hope later to be better informed.

When I reached the Fort I was in frightful condition from the blood poison. Addressing myself faithfully to the task of doctor and nurse I soon pulled to healthy levels. It seemed delightful to be a well man once more.

My Indians did well as Indians go. Most of such people are not clean, but as filth organizers mine could give cards and spades to any others I ever saw. To live among them, to be compelled to use them, and to witness their loathsome habits is one of the most abominable features of Northern travel.

The 1st of September found the country in autumn dress. Making sledges, snowshoes and other preparations for winter for Great Bear lake and the Copper mine was then the life of our camp.

Harold: You shouldn't wait for something to turn up, old chap; you should pitch right in and turn it up yourself.

Rupert: But it's my rich uncle's toes, old chap, that I'm waiting for.

TIGER HUNTING IN INDIA.

C. E. ASHBURNER.

Although only the 15th of March, the weather was so hot that dinner was served in front of the row of tents which had formed our home at Gurwaryhaan for nearly a month. If we dined with no roof over us but the Indian sky it was not because we were in any sense roughing it. Our commissariat officer knew his duty too well for that. Fifty miles from the nearest town, we fared as luxuriously as if we had been in London or New York.

Though the silver and glass had been transported for miles in bullock carts over rough roads, not a scratch nor a chip bore witness to the fact. Our Portuguese cook was a prince among cooks, and with a ring of stones in lieu of a range, could turn out a dinner fit for the most fastidious.

Now to the diners came the dignified Mahommedan butler and said gravely,

"A big tiger near Oobra, sahibs. She kill 2 bullocks and one old woman this morning."

Orders were given to our Bhul shikari to take his men out early next morning, find the tiger's tracks and watch the jungle in which she was until our arrival. Guns, rifles and cartridges were examined and given over to the care of the head shikari who was to accompany us.

By 5 o'clock next morning we were all astir; but before starting I will introduce my companions. First, our generous host, whom I will call Brown. Not more than middle sized, he was strong and full of dogged British pluck. "The sort of man to have at your back in a row," I once heard him described.

Of Mrs. Brown, it is only necessary to say she was worthy of her husband, and just the wife for a man whose life was spent mostly in the wilds.

The third of our party was a lank, bony young fellow, a captain of cavalry. No horse was too difficult for him to manage, no country too rough for him to ride over; but he was too reckless, when excited, to suit most sober minded shikar parties. Then there was Tompkins, a boy of 18 years, who had been more than 6 months in the country without learning a dozen words of the language. Having on one occasion succeeded in slaughtering a fawn, he considered himself a great authority on every subject connected with sport. This youth had been consigned by his father to Brown's care, and should before this have passed his first examination in Hindostani, and have joined a native regiment. Finding life pleasant and his quarters good, he did not trouble himself to study, and was still unprepared for his examination.

The dream of my life had been to visit India. Having at length attained my desire, I considered myself lucky beyond expression in having received an introduction to Brown and his wife. To be introduced to a man in India means that you share his house or camp, eat at his table, ride his horses and generally enjoy yourself as if you were his oldest friend.

At last we were off just as the sun rose. First down a steep path to the river, then in single file across it, a scramble up the farther bank, and we came together in the broad road cut through the jungle. We saw the usual jungle sights: the track of a bear; a magnificent nilgau, or blue bull; a herd of spotted deer; monkeys that swing from bough to bough; and peacocks, parrots and innumerable other birds on all sides.

We kept on at a steady canter, being anxious to reach the scene of action as early as possible. We swept past a large native village, with its high walls and narrow gateways, recalling the days when the villagers lived in constant terror lest the nearest Mahratta chieftain should swoop down upon them. At last we left the road, and half an hour's riding over rough ground took us to another village. Beyond that we came to a magnificent grove of mango trees, under which we found a small camp pitched by our servants and refreshments awaiting us.

Near by stood Brown's head shikari, who long before daylight had sent his men in search of the tiger's lair. He reported having followed the brute into a dense thicket of perhaps 20 acres, which was then surrounded by men stationed in trees about 50 yards apart. This plan of ringing a tiger is called getting him into a ghira, and when surrounded in this way the chances are 20 to one he will meet his fate. He is driven from the covert toward the sportsmen either by elephants or by men walking in line and tapping the trees. If he is inclined to go the wrong way, the native nearest him has merely to make a slight noise; then the animal either retreats or moves in another direction until brought up by a bullet.

There we were joined by Captain W., who brought a good shikar elephant well known throughout the district. This arrival gave us the use of the elephant for beating purposes, and made another gun available.

After ordering the formation of another ghira, outside the first one, we took a hasty luncheon and, leaving our horses, walked to the neighborhood of the ghira. Arriving there, we were stationed by the shikari at places where he said the tiger would probably pass. Then Captain W. mounted his elephant, and, rifle in hand, rode into the ghira. Mr. and Mrs. Brown were seated on a native cot fastened 12 feet from the ground in a tree growing out of the bank of a dry water course.

In the middle of the jungle the elephant gave notice of the proximity of the tiger by trumpeting and by striking his trunk on the ground. At last our enemy was afoot and trying to break out of the ring. At every point he was driven back. This went on for 20 minutes, during which time Captain W., on the elephant, could not, owing to the density of the jungle, get a shot. The tiger then jumped into the dry watercourse and walked toward Brown's station; but when within about 70 yards he climbed the opposite bank and followed along the top. Just opposite Brown's position was a clear space where he hoped to get a shot at the tiger as it passed. On came the tiger, walking quietly, and Brown was about to fire, when, to his surprise, the tiger fell dead.

Tompkins, who was over 100 yards away, had seen the tiger, and, contrary to all sportsman's etiquette, fired at him, notwithstanding the animal was opposite another man. It is also contrary to rule to fire at a tiger more than 40 yards away, unless he is escaping, as at over that distance there is no certainty of killing him. A wounded tiger is extremely dangerous. Had this one been merely wounded we should have been obliged to beat him up at the risk of injury to some of our men. When spoken to on the enormity of his conduct Tompkins said that the tiger was so large it seemed impossible to miss it. He appeared well satisfied with himself, notwithstanding the plain talk he heard on that occasion.

The dead tiger was strapped on the back of the elephant and sent to camp, while we returned to our tent in the mango grove where we had left our servants and horses.

Before we arrived we received word by a messenger that 2 friends of Brown's had a wounded tiger in a ghira in the vicinity, and wished him to bring his party and help finish the beast. We were only too glad to join our forces to theirs, and sent word to that effect. When we reached their camp we learned that they had wounded a tiger early in the morning, but having few men and an inferior shikari, could not succeed in killing their game. We lost no time in making the necessary arrangements for walking up the wounded tiger, it not being safe to attempt to drive him out.

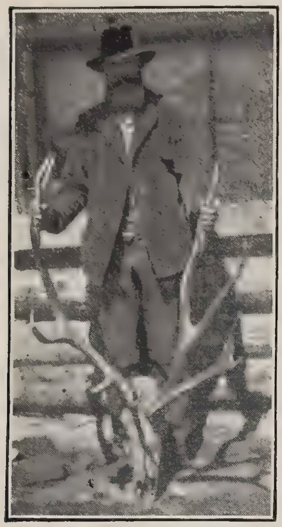
It was agreed that 3 men should take one side and 3 the other, each with a trustworthy Bheel behind him to carry spare guns and ammunition. The rest of the Bheels we sent around the jungle in which the tiger lay, to get up into trees and act as stops. Giving them time to take their positions, we walked into the jungle toward where the wounded tiger lay. We soon had notice of his whereabout. The trees under which he lay were full of monkeys shaking the branches over his head and swearing at him vigorously. We walked close up, but the beast would not charge, though he greeted us with many roars. Finally he charged outright in front of Brown, who fired at his chest as he bounded toward us. The express bullet hit him fairly in the center of the chest, and he turned a complete somersault, striking me with his hind quarters and knocking me down. I was naturally much startled and had quite enough of tigers for one day.

Hopkins: Old Brown is going to marry off one of his daughters pretty soon.

Popkins: How do you know?

Hopkins: The gas metre man told me.—Enchange.

A FREAK ELK HEAD.



A FREAK HEAD.

I send you herewith a photo of a 3-beam elk head. This head is certainly a curiosity, having 3 separate beams, which start from distinct burrs. The right beam is a good 6-pointer; the main or upper left beam comes from the head about an inch and a half lower down than the right beam; the third beam has a separate bar below and nearer to the center of the forehead than the main left beam. A close examination shows that this is not due to an injury received while young, as some might suppose, but is a natural growth of the skull. The man in this picture is Geo. M. Glover, a well known guide of this section, who has worked with us a good deal. This elk was killed about a year ago along the rim of Fall River basin, in Unita county, Wyoming, and is now in the possession of Col. S. Y. Seaborn, Detroit, Mich. I have lived among the elk many years, and have hunted and guided in what are considered the best elk districts in the Rocky mountains, but I do not know of any other head like this.

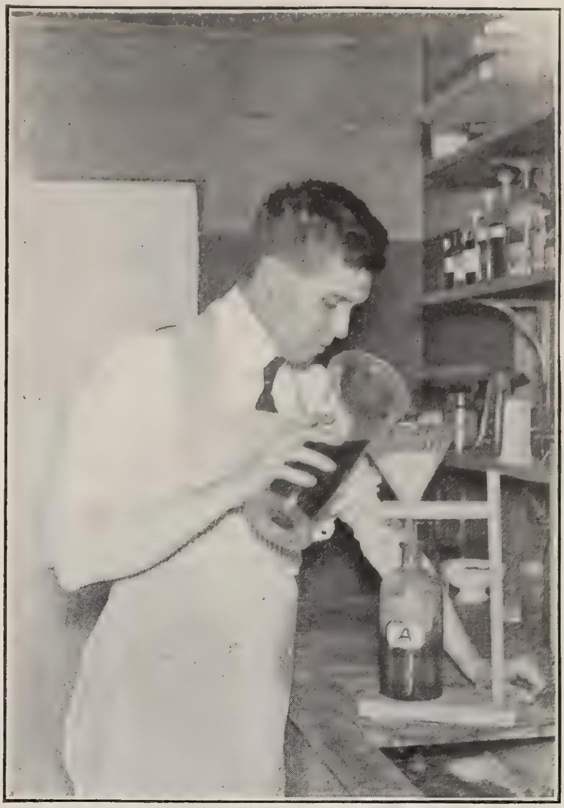
Albert Hill.
Alexander, Wyo.

NIMROD'S THOUGHTS.

Old Nimrod paused at Nature's shrine,
As music sweet from marsh and brake,
By wild fowls' luring voices made,
Filled all the air o'er hill and lake,
In one grand melody.

Nimrod listened, and memories sweet
Filled his heart, by the song revealed;
Memories fair, of marshy streams,
Of forest dells, of camp and field,
In the long time ago.

Nimrod spoke: "I would rather be here
At the springtime flight, or in summer's glow,
Or by the burning logs of a winter's fire,
Where memory pictures come and go,
Than to wear a crown."



AMATEUR PHOTO BY H. H. BOWEN

CRITICAL WORK.

Highly commended in RECREATION'S Fifth Annual Photo Competition.

AMATEUR PHOTO BY A. D. WITT.

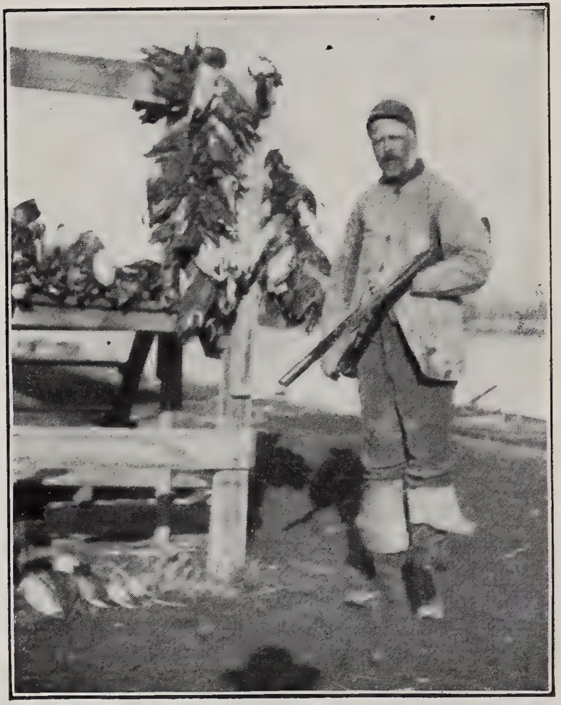
WAITING FOR LUNCH.

Highly commended in RECREATION'S Fifth Annual Photo Competition.

COLORADO HAS ONE.

I hand you herewith a photograph of Herbert Gardner, of this city, who claims to be a hunter, but judging from the picture, I should not class him as such. I should like you to write him and ask him if this is his killing, made on the Bear River Flats, Utah, in 2 days. If he admits this butchering as his work, should like to have you class him with the rest of your pigs.

C. A. R., Colorado Springs, Colo.



I did write the old hog and ask him if the report was correct, but he evidently smelt something besides his own filth and declined to answer. No decent man ever thinks of being photographed with such a lot of game in this age of the world. Gardner is one of the old fashioned, backwoods breed and deserves to be branded G. H. on his forehead and on each cheek.—EDITOR.

A young man contemplating matrimonial felicity, took his fair intended to the home of his parents that she might be introduced to the old folks.

"This is my future wife," said the young man, proudly, turning to paterfamilias, who was a canny Scot. "Now, father, tell me candidly what you think of her."

The old man eyed the blushing bride-elect critically for fully 2 minutes, then answered, with deliberation:

"Well, John, I can only say you have shown much better taste than she has."—Exchange.

A POACHING WARDEN.

Not a thousand miles from Ludington, Michigan, there is a game preserve owned, or leased, by the Kinney Creek Game Club. A few weeks ago, in anticipation of the encroachment of poachers, the club decided to hire a game warden to protect their interests, and selected a man from town, named Bates, for the position. The season for duck shooting in Michigan had not opened when the new warden reported for duty, but the first night he was out he determined to do a little poaching on his own account. Accordingly he set out some decoys soon after dusk, seated himself behind a blind, and awaited developments.

Within half an hour he heard a familiar "quack," "quack," and saw some dark objects swimming around the decoys. Mr. Gamekeeper, who should have been protecting the interests of his employers, fired both barrels of his 10-gauge into the flock, bagging 8 of them. Procuring a boat he picked up the ducks and started into town to boast of his prowess.

Alas for the game hog, who didn't know a wild duck from a litter of pigs. When he reached town with his prize, he learned to his discomfiture he had wasted his powder on some tame Pekin ducks belonging to a farmer some 2 miles down the river. There was a grand laugh at his expense, and the expense was increased a few days later when the club received a bill from the farmer for the loss of his ducks amounting to $4.75. It was paid and deducted from the gamekeeper's first month's salary. He isn't shooting any more ducks now, even if the season is open.

Mallard Drake, Chicago, Ill.

THE SNOW PHOTOS.

(See page 18.)

I hand you herewith my dollar for membership in the League, although I need the money for many other things.

Before I began to read RECREATION, I thought I did not have much sport unless I could kill something every hour; but now I more often hunt with my camera than with my gun. I am sending you by this mail some photos of the beautiful snow which has covered everything. It was 4 inches deep on the telephone wires, so you can understand how it clung to everything. It did a lot of damage to fruit and other trees; but oh, what beauty met my eyes on putting up the window shades. I had my camera in less than 5 minutes. The views were taken before the snow was disturbed, early in the morning, and while it was still snowing.

D. H. Darling, Guilford, N. Y.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman

TO RESTRAIN THE INDIANS.

Magdalena, N. M.

Editor RECREATION:

As the time is about ripe for the Indians to come down on their annual slaughtering, I hope some preventive measure can be taken at headquarters. The Indian bureau should stop their agents on the reservations from issuing these hunting passes, when it is against the laws of the Territory that this slaughtering should continue. From reliable parties I hear that one small party of Indians secured about 200 pelts, much of the meat being wasted, no doubt. This was their hunt last fall before the L. A. S. was in force here. It is nothing unusual for the Indians to round up a bunch of antelope and kill every one of them. At least it was not at one time; but antelope are so scarce now it may be difficult to find a bunch. If the agents would use their influence to keep the Indians on their reservations, we should be saved a great deal of trouble, perhaps bloodshed, as our citizens are determined. These agents may share in the spoils, namely, venison and buckskin; as at all the agencies there are small stores, or trading posts.

This is a great game section, but if this slaughter continues much longer it will be anything but a game field. At present our division is not strong enough to cover the entire section, of which we are in the center, or nearly so, but as soon as we are allowed a secretary we shall try to increase the membership. W. P. Sanders.

To Mr. Sanders I replied:

Following is a copy of a letter I have written the Commissioner of Indian Affairs:

Hon. Commissioner of Indian Affairs,
Washington, D. C.

About a year ago I had some correspondence with you regarding the killing of game in New Mexico by Indians. I am now in receipt of a letter from the Chief Warden of the New Mexico Division of the League of American Sportsmen, calling my attention to the fact that a great deal of game was killed by Indians in New Mexico all last fall, in violation of the Territorial laws, and asking that steps be taken to prevent a repetition of such slaughter this year and for all future years. I respectfully request, therefore, that you take up this matter with your agents in New Mexico and that you positively prohibit the issuing of passes for Indians to leave their respective reservations for any purpose during the fall or winter.

You are doubtless aware that the elk is practically exterminated in New Mexico and that but few antelope and deer are left there. I am safe in saying that there are scarcely 200 antelope left in the entire Territory. At the earnest solicitation of this League the Legislature of New Mexico enacted a law last winter prohibiting the killing of elk, deer, antelope and mountain sheep at any time prior to March, 1906. It is believed that if this law can be enforced, even to a reasonable extent, these species of game will rapidly increase, and I trust we may have the hearty coöperation of your department in enforcing this law. The better class of residents of that Territory are deeply interested in this case and a large number of the best business men there are members of this League. They are coöperating with us diligently in our efforts to save the few remaining animals of these various species from extermination and they will heartily appreciate whatever efforts you may put forth to keep the Indians on their reservations. I should be glad to be advised of your action in this matter.

I append the reply of the Honorable Commissioner:

Mr. G. O. Shields, New York:

I am in receipt of your communication of the 23d ultimo. In reply, you are informed that the respective Indian agents and school superintendents in charge of the Indian reservations in New Mexico Territory, have this day been fully advised relative to the statements made in your letter as to the destruction of game in the said Territory, and have been instructed to take such action as may be necessary to prevent, so far as possible, a repetition of the evils complained of in the premises.

W. A. Jones, Commissioner.

It is well known that one of the most serious problems in the case of protecting the wild animals of the far West is that of preventing the Indians from slaughtering the game. Ever since its organization the League of American Sportsmen has been laboring with the Indian Bureau with a view to preventing as far as possible any of the Western Indians from leaving their agencies, under any pretext, in order that they may invade the hunting grounds to kill game there in violation of the State laws or the laws of reason and economy in native life. As a part of this work I have recently written a circular letter to all the Indian agencies in the Western States, of which the following is a copy:

As you are, of course, aware, the Indians of most tribes in the West get permission from the agents each summer or fall to leave the reservations, under some pretext or other, and when once they go into the game countries they destroy great quantities of game. Some of this hunting is done in close season and some in open season; but, in any event, the white settlers in the vicinity invariably feel aggrieved. Some of them always complain to this office and ask that measures be adopted to stop this killing, whether legal or illegal. There are always 2 sides to every such case and the Indians are entitled to a certain amount of consideration; but the game has become so scarce everywhere in the West and is so sorely threatened with total extermination that all thoughtful men, especially all nature lovers, East and West, are extremely anxious that every precaution should be taken henceforth to reduce the killing, by white men as well as Indians, to a minimum.

You are doubtless aware that, realizing the danger of the total wiping out of certain species of wild animals in New Mexico, the Legislature of that Territory at its last session, in obedience to an urgent request made by this League at its annual meeting 2 years ago, passed a bill prohibiting the killing of antelope, deer, elk and mountain sheep at any time prior to 1906. There is no longer any reason why the Indians should be allowed to hunt in that Territory at any time. There is no game they would care to kill that may be legally killed at any time.

I do not assume to instruct you as to how to handle the Indians under your charge, but I do venture, as the President of this League and as a representative of its 7,000 members, distributed throughout the entire United States, to beg you to do everything possible to prevent the Indians under your charge from killing any of these species of game within the time above specified. I realize that it may be necessary for some of these Indians to leave their reservations at certain times. I also realize that nearly all permits granted in such cases are abused. The majority of the Indians have no regard for law. Neither have they any sentiment on the subject of protecting the game. They care not how soon any species of wild animal is exterminated. It, therefore, rests with white men, and especially with the Indian agents, to do whatever may be done for the preservation of these grand animals.

This League represents the best thought of the whole country on the subject of game protection. You can readily understand this when I tell you that the League includes in its membership the President of the United States, 7 members of Congress, the Governors of 7 States, including your own, the ex-Governors of at least a dozen States and at least 100 members of the Legislatures of the different States. Furthermore, our membership includes hundreds of prominent men in all walks of life.

Added to this, I speak for the 330,000 readers of RECREATION, nearly all of whom are friends of game protection. I say this advisedly, for I have waged such a relentless warfare against market hunters, skin hunters, and game destroyers of all classes, for the last 5 years, that I have alienated nearly all such from my list of readers. On the other hand, I have reformed thousands of men who were at some time or other thoughtlessly destroying game and who have written me that after reading RECREATION a few months they have seen the error of their ways, have quit all such destructive work, and have joined the ranks of game protectors.

I, therefore, earnestly beseech you to coöperate with us in every way possible in this great work and especially to refuse to grant permits to any of the Indians under your charge to leave their reservations in any case where there may be the least suspicion that they will slaughter game when they get away. If you will give us your assistance in this way, you will thereby merit, and I shall see that you are accorded, the hearty approbation and the thanks of every one of these thousands of good men I have mentioned. Should be glad to hear from you on this subject, and shall await your reply with keen interest.

Sportsmen and nature lovers of the far West are again requested to notify me of any cases that may come under their notice of Indians hunting off their reservations in violation of law. In order to make such reports effective with the Indian Bureau it is necessary that detailed information should be given. If possible the names of the Indians should be obtained. In most cases this is impossible; but in every case the complainant should ascertain to what agency the Indians belong, where they have been hunting, dates on which the killing was done, and all data possible. In every case where such reports are made to me I transmit them to the Commissioner of Indian Affairs, with a request that the agent giving the permit may be called to account and restrained, if possible, from giving passes to such Indians in future to leave their reservations.

The Indian Department is kindly disposed toward efforts of this character to preserve the wild animals in the far West and most of the Indian agents themselves are with us in sentiment. If, therefore, those interested in this work will make such complaints in every case that comes under their notice, the unlawful killing of game by Indians may be rapidly curtailed and eventually broken up.

Following are copies of the replies which I have received to date:

Fort Belknap Agency, Harlem, Mont.
Mr. G. O. Shields, New York:

Aside from being a reader of Recreation and a consistent lover of sport, I fully realize the importance of protecting game in every way possible. Acting in an official capacity, I have explained to the Indians of this reservation the importance of preserving game and I frequently importune them against its wholesale slaughter. They seem to understand and appreciate the condition, and while parties adjacent to the Fort Belknap reservation have complained in the past that our Indians leave without permission and kill game at all seasons, I have always been able to trace these depredations to the various bands of nomadic Cree Indians who infest this State, and not to our Indians, who are made scapegoats and are sometimes unjustly punished. I give you my assurance that I shall at all times heartily coöperate with your splendid organization, both personally and officially, in keeping down the destruction and willful slaughter of game. No passes are given to Indians in large bodies to leave this reservation for the purpose of hunting, and as our police are active and vigilant I can safely say that no violations of game laws occur among these people.

M. L. Bridgeman,
U. S. Indian Agent.

Crow Agency, Mont.
Mr. G. O. Shields, New York:

I am in perfect accord with the sentiment expressed in your letter. As you state, it is an undeniable fact that there are 2 sides to the question. The Indian side of this question is entirely different from that of the settlers making complaints from time to time. To begin with, under the treaty with the United States entered into between these Indians and the Government, in 1868, the privilege was extended to these Indians of hunting on any unoccupied Government lands, no limit of time being given or season stated. The Indians of this reservation, however, observe the game laws to a greater extent than do many whites surrounding the reservation. I do not believe any of the Indians have killed antelope since the passing of the act by the Legislature, mentioned by you in your letter. A hunting party of Indians seldom leaves this reservation, and then only in open season. I am always glad to coöperate in the preservation of what little game is left, and should be glad to hear from you at any time in the future.

J. E. Edwards,
U. S. Indian Agent.

Kiowa Agency, Anadarko, Okla.
Mr. G. O. Shields, New York:

The Indians of this agency never leave their reservation to kill game. There is but little large game left in this section. The Indians who have lived on the reservations of this agency do but little hunting of any kind. The country has been justly famous for quail and chicken shooting, but there is reason to believe that the day for such sports in this section will soon have passed. The whites that have come here incidental to the opening of this reservation have had no respect for game laws of the Territory, and have killed the birds for subsistence without remorse. I respectfully suggest that you make an appeal to the Territorial authorities to stop this wanton destruction of the birds. While I remain agent for the Indians I shall endeavor to prevent violations of game laws on lands allotted to the Indians and all agency reserve lands. Indians seldom kill the small birds. I am under the impression that the Territorial authorities have recently been considering the matter and appointing wardens when applied for.

James F. Randlett,
Lt.-Col. U. S. A., U. S. Indian Agent.

Tongue River Agency, Mont.
Mr. G. O. Shields, New York:

I am fully in accord with you in your views with regard to the indiscriminate killing of wild game by Indians or others. For the past 3 years I have given no hunting passes to the Northern Cheyenne Indians, and few other passes to visit distant reservations, as I am satisfied that the frequent visiting of Indians from one reservation to another has a great tendency toward keeping up their nomadic mode of life, which is a great drawback to their civilization.

You may rest assured I shall use every endeavor to prevent the Northern Cheyennes from killing or in any way molesting wild game of any kind. These Indians will be kept on their reservation as far as possible.

J. C. Clifford,
U. S. Indian Agent.

Fort Peck Agency, Poplar, Mont.
Mr. G. O. Shields, New York:

I am in full accord and sympathy with sentiments contained in your letter. For 3 years past I have refused permits to

Indians to hunt either in the open or the closed season. I have also caused the arrest and conviction of Indians killing game out of season. As you say, the Agents on the different reservations could in a large measure stop the wanton destruction of game by Indians. I will cheerfully assist your association in any way I can. I have been a resident of Eastern Montana 20 years, and have seen with sorrow the extermination of large game. The Northern part of this reservation is a great rendezvous for antelope during the winter, and I will see that the Indians leave them alone.

C. R. A. Scobey, U. S. Indian Agent.

Sacaton, Ariz.

Mr. G. O. Shields, New York:

I am pleased to say that the Pima, Papago and Maricopa Indians under my charge, numbering about 9,000, are strictly subordinate to the agent. In no case have I had any complaint of their violating the game laws. It shall be my pleasure to coöperate with the League of American Sportsmen in enforcing these laws. I am careful in giving the Indians permits to leave the reservation, and in guarding against any violation by them of the Territorial laws. I have no fears of their violating the game law. They are obedient to instructions, a peaceable and law-abiding people.

Elwood Hadley,
U. S. Indian Agent.

Nez Perce Agency, Spalding, Idaho.

Mr. G. O. Shields, New York:

The Nez Perce Indians are, by the courts, declared to be citizens of the United States. They can not be restricted from leaving this reservation and going wherever they please and whenever they please. The only way to get at them is by enforcing the State law against the crimes of which you write. I have cautioned, admonished and advised these Indians to be careful in the slaughter of game, to use all of the meat and hides, wasting no part of said game, and to kill only such as they actually need for their own consumption. I assure you I have your cause at heart, and will do all I can for the protection of game in this section.

C. T. Stranahan, U. S. Indian Agent.

Cheyenne and Arapaho Indian Agency,
Darlington, Okla.

Mr. G. O. Shields, New York:

Nothing would give me more pleasure than to comply with your suggestions and request, if the case in point had any bearing on this reservation; but it has not. The Cheyenne and Arapaho country was thrown open to white settlement in 1892, and no game to speak of abounds. There are some birds and small game in the sparsely settled districts, but that is all, and every effort is made to enforce game laws. Yours is most certainly a laudable undertaking, and I wish you every success.

Geo. W. H. Stouch,
Major U. S. A., U. S. Indian Agent.

Cheyenne River Agency, S. Dak.

Mr. G. O. Shields, New York:

I concur in the views expressed by you. It has been my policy since assuming charge of this Agency to grant no passes to the Indians of this reservation for the purpose of hunting beyond the borders of this reserve at any season of the year, nor permit them to carry firearms when visiting any other reservation. Since receiving your communication and noting the deep interest manifested in this matter by your association, I shall take pleasure in using every possible precaution with the Indians under my charge to prevent them from abusing the game laws.

Ira A. Hatch, U. S. Indian Agent.

Blackfeet Indian Agency, Browning, Mont.

Mr. G. O. Shields, New York:

The Indians of this reservation do little hunting. The game laws of Montana are severe, the game wardens seem to be alert, and the slaughter of game is minimized. I assure you, however, of my hearty coöperation in attaining the aims of your League.

James H. Monteath,
U. S. Indian Agent.

Rosebud, S. Dak.

Mr. G. O. Shields, New York:

Of course I will coöperate with you in any way possible to protect the game. These Indians do not leave the reserve for the purpose of hunting. They may kill a few ducks and chickens on the reserve, but this is done in season, and the law is not violated in any way.

Chas. E. McChesney,
U. S. Indian Agent.

STRANGE VISITORS.

September 6th I went to Upper Lake Minnetonka to bring my wife and baby from a short outing. The forenoon was mine; I spent it in fishing and got a few bass. While casting, a flock of 6 birds came so close I could positively identify them. They were snow geese (*anser hyperboreus*) in the bluish gray immature plumage. Late in the afternoon my wife and I saw what I thought was the same flock flying back over the train at Spring Park. Where did those birds come from? There is no record of their nesting anywhere in Minnesota, and they were about 8 weeks ahead of their migration.

H. W. Howling, Minneapolis, Minn.

CAMPING OUT AND COOKING.

Cheyenne, Wyo.

Editor RECREATION:

When in the woods I live on common food, good and nourishing, that will last, when taken at 5 o'clock a. m., till I get back at night. Every hunter who goes into the woods is nearly sure of his own meat, if not venison, then rabbits or chickens; but he should also take some breakfast bacon, as a change and for the grease or lard he can get from it.

Everybody ought to know how to make bread, but we find among campers many who can not bake it. Light bread should never be made, because it is a great deal of trouble and necessitates extra dishes. Make sour dough or baking powder bread. Four sour dough, mix flour and water with a half teaspoonful of baking soda and let it stand in a warm place till the dough gets sour. Then use enough sour dough according to the flour you have to make a stiff paste. Mix well, but do not make a rock of it. Roll out and bake in a hot oven. For baking powder bread, make same as sour dough and put 3 or 4 tablespoonfuls of lard in flour for shortening. Make into biscuits. They bake quickly and can be used even after they are one or 2 days old by being dipped in cold water and warmed.

Meat may be fried, stewed, baked, etc. When frying bacon, fry till done, then pour off the grease and cook 2 or 3 minutes longer.

A good way to handle a grouse is to clean it thoroughly, but leave on feathers; stuff with cooked apples and dumplings; paste soft clay all over the bird so that no feathers show; lay in a bed of hot coals and bake till done. Break off the clay and the feathers, skin and leaves will come with it, leaving the pure, juicy meat, which, with gravy, bread, butter, coffee, potatoes, beans, rice and apples will give you a dinner fit for the gods. Rabbits can be cooked in the same way by leaving on hide.

When cooking beans, always pour on hot water; cold water chills them, and they take longer to cook. When baking biscuits in a Dutch oven, care should be taken not to burn them. Make common biscuits and have bright hardwood coals. Do not have a blaze or your oven will get too hot.

Pancakes made of sour dough are good for breakfast. Mix as much flour as you want with half as much sour dough, add salt and mix with cold water into a soft batter.

When frying potatoes have your frying pan 1-3 full of lard or grease and cover it. This steams the potatoes and does not take long.

Venison can be dried by cutting it into strips of 6 x 10 x 2 inches, leaving no bones. It can be dried behind the stove, and is good to take for a lunch. Before drying venison let it lie in saltwater half an hour.

Rice can be cooked in water with a little salt added.

For making gravy, take 4 tablespoonfuls of lard, one tablespoonful of flour, a little salt and pepper. Let the flour and lard brown in a frying pan. When brown, add one cup of water and cook till it thickens.

Canned corn and tomatoes are good to take into camp if you do not need to economize weight, as tomatoes can be served raw and corn can be cooked in 2 minutes in a frying pan with a little grease. Dried fruit should always be taken along, as it is quickly cooked. Dumplings can be made by mixing flour and baking powder, salt and water into a dough. They are good with potatoes, beans, meat, biscuits and rice.

Pie and cakes are hard to make on a camping trip, as eggs are hard to carry.

A delicious variation of the monotony of camp fare can be made with little trouble from simple materials, and will set off the Sunday table in a way to make the rusty old camper, far from the haunts of men, think of his mother's table in the days when he wore linsey-woolsey, and lived in the dear old home, before the world had grown little, and sour, and mean. Slice green apples thin, cutting always across the core. Drop these into a thin batter of flour and water, with a spoonful of baking powder, a pinch of salt and a dash of pepper. Take them out, slice by slice, each in a big, stirringspoonful of batter, and drop them into a kettle of boiling lard. They will swell out like Democratic politicians, and get presently brown as berries. Served with syrup made from sugar, brown if possible, they will add a gusto to the meal which the habitués of Delmonico's never get with their terrapin or canvasback.

Should a surplus of meat be cooked at any time, and allowed to stand cold, it may be utilized with potatoes. Cut both up into small chunks, the meat fat and lean, the potatoes peeled, and stew down in kettle or frying pan, keeping covered and seasoning to suit with salt and high with pepper.

The feast of the camper, on ranges where he may be found, is the roast 'possum, smothered in his own gravy, and garnished with sweet potatoes, peeled, and cooked in the same oven or pan.

Max Brown.

WHY PROTECT COONS?

Baltimore, Md.

Editor RECREATION:

There is much work to be done in this State, and the L. A. S. can be made to yield an influence heretofore not known. We have a State Game and Fish Protective Association, and while this has been instrumental in doing much good, there is still ample room for great improvement. The L. A. S. could work in harmony with the State forces as already constituted, with increased protection to our game and fish. Our laws relating to the latter need radical changes, while many provisions might be made throwing greater protection around our game. I hope to go down to Annapolis this winter when the State Legislature is in session, and make a personal thing of seeing that amendments are made to existing laws, meant to protect, but which do not protect, and which but ill-advisedly complicate the game laws of this State. They are meant for good, but being the product of men who are not acquainted with the character and habits of the game they would protect, the laws work both a hardship to the game and an annoyance to the true sportsman.

For instance, in certain counties in this State, it is unlawful to catch, kill or trap the raccoon in the months of October and November, nothwithstanding Dame Nature has supplied him with a luxurious growth of hair that he may stay out late on sharp, frosty nights, and be prepared to rest comfortably when the cold blasts of winter come in earnest. But the same law says you can catch, kill and trap him in March! What a travesty on the domestic rights of the poor coon to legalize his or her slaughter in a month when the hair is beginning to shed, and what is worse, at a time when for obvious reasons the mother should receive every protection! It is well known that coons bear young in April. But why agitate the subject by protecting the coon at all? He is here to stay, from Maine to Florida, is hunted but little as compared with other animals, and when hunted is seldom caught. Why fill our law books with game-law rubbish? We want to get right down to the merits of each and every particular case, and drive home that protection which the thing considered may require. I am not hostile to the coon. I am his friend and will protect him in a fair fight, while in a fair chase he is well equipped to successfully protect himself. I mention the above to illustrate that we do not need more legislation, but better. Then, would-be violators will have a wholesome respect for both the letter and the spirit of the law. In the case of the raccoon, I have positive assurance that he does much damage in localities thickly settled, and within reach of his depredations. In one case, a farmer, attracted by my dogs some mornings ago, appeared on the scene and found your humble servant high up in a tree trying to get a coon out of a hole.

"Why don't you cut the tree down?" he called up.

"Don't want to cut any good timber," I replied.

"That doesn't make any difference. Cut every tree in the woods if you can break up these d—d coons."

"But I don't want to break them up; only to catch this one alive."

"Well, I want them broken up. My corn looks as if a gang of hogs had been through it," etc.

Worse than all, the ravages of this animal in breaking up quail and all other kinds of bird nests can never be known or determined. In a chase one morning last summer, I have a witness, with myself, to the fact that a coon which had been chased up an old post, with the dogs below, barking, flushed a mocking bird out of a hole, and while the bird made frantic circles in the air and repeatedly darted down at the coon, that little animal, with both eyes on his tormentor, ran first one paw and then the other in that post hole, then both paws, and taking out 5 eggs, one at a time, ate them as suavely and complacently as a boy would eat peanuts at a circus. So why protect the coon in October and November and murder by legal enactment the mother coon as she gets ready for housekeeping in March?

I should like to join a party of gentlemen some time, to visit the big game country, principally to hunt with a camera. If you know of such parties going out, I would thank you if you would kindly mention my name in that connection.

J. E. Tylor.

CALIFORNIA'S GAME LAW.

Game Warden J. J. Chapman came in yesterday from the Elizabeth Lake country with 2 more quail hunters in tow. He caught Henry Reynolds and John Coe in the act in the fine quail country between Newhall and Lancaster, and took them before Justice Barkley, of San Fernando, who promptly fined them $25 each. This is Chapman's 13th conviction in 2 months.—Los Angeles (Cal.) Times.

Mr. Chapman is doing first-class work, and should be encouraged. So, also, should such judges as Justice Barkley. It is to be hoped others will follow their good example.

For the benefit of intending visitors to California I give a synopsis of the game laws of this State.

The sale of all game except ducks is prohibited.

Quail and duck season: October 1 to February 1.

Dove and tree squirrel season: August 1 to February 1.

Deer season: August 1 to October 1.

Bag limit: 25 quails, 50 ducks, 50 doves, daily; 3 deer during the season.

Does, spotted fawns, antelope, elk and mountain sheep can not be killed at any time.

No game whatever can be had in possession during the closed season.

Night shooting is prohibited.

No game can be transported from the State except for scientific purposes.

No killing of meadow larks except where the birds are destroying crops, and then the owner or tenant must do the killing.

For the purpose of enforcing the laws each county may have a game warden, with a salary of $50 to $100 a month, and not more than $25 extra for expenses.

The limit on the daily bag of ducks and doves is twice what it should be, and no one should be allowed to kill more than 12 tree squirrels in a day. As far as I can learn, nearly all county laws have been abolished since this new State game law was passed. It is fortunate such is the case, as it makes the law uniform throughout the State. The farmers where I was last summer kill doves all the time, and a number put out poisoned grain to thin out the doves. An article on the food of doves might prove of interest to California readers, and I for one should be much obliged for a little light on the subject.

H. V. S. Hubbard,
Los Angeles, Cal.

MR. SETON NOT GUILTY.

One of Colorado's deputy State game wardens, named Bush, arrested John B. Goff, a noted guide and ranchman, who lives near Meeker, and Ernest T. Seton, the well known author, artist and naturalist, in October last, took them before a justice of the peace and charged them with baiting a bear trap with venison. The case was tried before a jury composed of some of the largest tax-payers in the county, and Bush failed to produce a particle of evidence to sustain his charge. After being out only a few minutes the jury returned with a verdict completely exonerating both Mr. Goff and Mr. Seton and characterizing the charge as malicious persecution. Mr. Seton subsequently published the following statement of the case:

To the Editor of the Herald:—

In your issue this morning you quote from Denver papers a statement that is calculated to do me much injustice. You will, therefore, I hope, allow me to correct the impression.

I was arrested in Colorado for being in company with John B. Goff, who was charged with setting a bear trap with venison. In the court it was abundantly proved that:—

First—I never owned or set a bear trap in my life.

Second—That I had not carried a gun or fired a shot or killed or trapped any animal on the whole trip.

Third—That my only weapon was a camera.

Fourth—That Mr. Goff was wholly innocent of the charges made.

Fifth—That the game warden, named Bush, was seeking a little cheap advertising.

Sixth—The verdict was: "We, the jury, find the defendant not guilty as charged, and believe the prosecution to be malicious."

Seventh—It was proved on behalf of Mr. Goff's dogs that they were trained so they would not chase a deer. Interesting side evidence of this is found in Scribner's Magazine for October. In that issue, President Roosevelt, who hunted with Mr. Goff last winter, enlarges on the remarkable fact that these hounds are among deer the year round, and yet are so well trained that they never think of following deer. I may add that my own observation on a hundred different occasions entirely confirms this.

Ernest Seton-Thompson.

New York, Oct. 11, 1901.

No further evidence will be needed by the thousands of readers of Recreation who know Mr. Seton to completely exonerate him and Mr. Goff.—Editor.

BROKE NON-EXPORT LAW.

I enclose clipping from Minneapolis Tribune which may prove of interest to you. Judging from the men having so many trunks they were game hogs as well as evaders of the law. Let us hope they will get the limit. You get so many words of praise for Recreation and for your splendid work for game preservation that it seems superfluous for me to add any, but I want to tell you how thoroughly I enjoy the best sportsman's magazine on earth, Recreation, and of my respect for your fearless work in the extermination of fish and game hogs and the encouragement of a manly, self-respecting race of sportsmen.

H. A. Allen, Minneapolis, Minn.

The clipping enclosed by Mr. Allen is as follows:

Frank C. Hale made a clever haul of game that was being shipped out of the State. Mr. Hale is attorney for the game and fish commission, and he had noticed trunks going through Minneapolis, checked from the duck grounds. He secured a bench warrant leveled at the handy gentleman named John Doe, went to the Milwaukee depot and seized three trunks. They were nicely stocked with ducks, fine hammerless guns, cartridges and expensive hunting paraphernalia, and the ducks were at once appropriated. The owners will be enabled to secure their guns and equipment if they will come forward and prove property, and pay a certain sum for every bird shipped. The law evaders will have to do a sum in arithmetic before they ascertain whether they would rather lose the guns or pay the damages.

I reckon that is about the most disagreeable "hail" storm those fellows ever got caught in. The next time they go duck shooting it would be well for them to charter a balloon to take their game out of the State if it happens that the State they hunt in has a non-export law, as most States have nowadays.—Editor.

MR. EMRICK NOT THE WRITER.

The statement on page 288 of October RECREATION about the White Bear hunter violating the game law is surely incorrect. I do not think any of those men at White Bear ever killed a deer in their lives. About Floodwood and Grand Rapids I know nothing, but am positive the first 4 mentioned in the item are not guilty. I enclose a letter I have received from Mr. Emrick. Mr. Fullerton surely knows Mr. Turner. I think he was appointed special warden last year.

Any man who will sign another man's name to a letter is not of much account. I can almost swear that neither Mr. Griggs nor the Kitsons ever killed anything larger than a duck. I met Mr. Emrick about 6 months ago. He was a stranger in town and I have never seen him since. That item is a fake story and not written by Emrick. It is all right to roast the right party, but I'm sure the 4 are not guilty.

S. B., White Bear Lake, Minn.

The letter above referred to is as follows:

I wish you would tell Mr. Turner, Mr. Kitson and brother and Mr. Griggs that the statement in October RECREATION is a lie. Any man who is so low as to sign my name to an article of that kind does not amount to much. I do not know any of those gentlemen whose names are mentioned and who are accused of violating the game law. I was in White Bear only one day, about 6 months ago, and not since that time have I even passed through that town. I am not a game warden and never was.

Chas. H. Emrick, West Superior, Wis.

ONLY HOGS; NOT LEAGUE MEN.

Two more game butchers were caught here last summer with fledgling prairie chickens in their possession. The men, H. L. Hubbard and A. J. Teer, both members of the L. A. S., drove to the shooting ground in a buggy, which they left by the roadside. A farmer passing looked in the vehicle and saw some dead birds. Thereupon he drove the outfit to Dodge City and delivered it to the sheriff. When the hirers of the rig reached town after a walk of 11 miles, they were taken before Judge Labrand and fined $19 each. The farmer received $10 as a reward for their capture. Dr. Milton, of Dodge City, was the prosecutor in this case.

D. A. E., Newton, Kans.

You are mistaken in saying these law breakers are members of the League. They are not. If they had been they would have had more sense than to shoot chickens before the opening of the season or to shoot fledglings at any time. Hubbard and Teer have learned a valuable lesson, and it is hoped they may hereafter be willing to wait until the season opens and until young birds are able to fly at least 100 feet.

If D. A. E. will give me the name and address of the farmer who gave these law breakers the long walk into town I should be glad to send him RECREATION one year free of charge. Furthermore, I should be glad to send the magazine to 100 other farmers on the same terms if they will adopt such summary means of rounding up game hogs as this man did.—EDITOR.

A CHRONIC HOG.

I feel it my duty to write you about a game hog of this place. He is a passenger conductor, running between Chicago and Rock Island on the C. R. I. and P. Railway. His name is H. R. Huntington. About Jan. 20 he went to Letts, Iowa, hunted 2 days and brought home a grain sack full of quails. I understand he did his hunting on the Letts farm; but, at any rate, he got the quails and boasted that he had a right to shoot them, as the owner of the land said he might. I am certain he had no license to shoot in Iowa, and even if he had he had no right to shoot quails in close season. This is not his first offence. He goes to Dakota every year and slaughters all the prairie chickens he can. He was never known to take out a license in any State. He was dropped from the gun club here on account of his greedy nature. He is known among the men here as Old Grab All. It is time he was branded. Am informed the quails in question were disposed of in his usual way, that is, handed around among the officers of the railway for a stand-in. No doubt Huntington will deny this if confronted with it, but anyone here can, and I think will, tell you the nature of the beast. I have nothing against him but what I have stated, but that is enough. I appreciate the good work you are doing and never miss a copy of RECREATION. Huntington claims to be a sportsman. If he is I am not. He has a son who is said to be a close second to the old man.

A. R. P., Blue Island, Ill.

A LOVER OF QUAILS.

Your magazine is the best one for the true sportsman that I have ever read. I am an old prospector and spend most of my time on the desert or in the mountains, consequently am not in close touch with civilization.

The best way to protect the birds is to confine the shot gun to clay pigeons. I kill all the quails, ducks and grouse I want with my rifle. I take about 6 quails, 2 ducks and 4 grouse for my limit every year when I happen to be where they are, anywhere but near my camp. I never kill any kind of game that comes to my spring to water. I have a flock of 57 quails at my spring now, and the man who would shoot them would have a hard time of it. I brought the old birds from the Colorado river, 70 miles, on burros, and turned them loose in the mountains 4 years ago. Now, there are a few at all the watering places in these mountains. It has been so dry here for the past 3 years that the quails did not mate. This year they seem to have done well. I know where there are thousands of quails. They are not shot at except by the Indians and an occasional prospector. I do not wish any of the game hogs to learn where these birds are.

Let the good work go on. Why not get the gun clubs to limit themselves to 10 birds each in a season for 10 years? The birds would increase by that time so each member could take, say, 15 in a season.

John Packer, Danby, California.

GAME CONFISCATED.

I enclose a clipping taken from the Port Jervis *Gazette*. I am a staunch supporter of game protection and of RECREATION.

John Dougherty, Jr., Rio, N. Y.

The clipping enclosed states that Dr. Joseph Kalbfus,, secretary of the Pennsylvania State Game Commission, accompanied by State Game Warden Joseph Berrier, of Harrisburg, went to Glen Eyre, Pike county, recently to investigate charges that members of the Bloominggrove Park Association have been violating the game laws. A number of English pheasants, several native pheasants and some grouse were discovered in the possession of N. S. Smith, President of the Park Association; R E. Bretnall, of Newark, N. J.; Robert Post and another son of the late Andrew J. Post, of Jersey City; and John Kusser and Benjamin Kusser, of Trenton, N. J.

President Smith assumed the responsibility of the appearance of the men when wanted to appear to answer to the charges preferred, and the secretary of the State Game Commission permitted them to return to their homes. The game was shipped to the Lackawanna hospital, Scranton, in conformity with the State law, which provides that all game seized must be sent to the hospital for the care of wounded soldiers.

Dr. Kalbfus intends to prosecute these parties in the middle district of the United States Court in Pennsylvania. the offenders being liable under the Lacey law.

DO NOT KILL GREYS.

I should like to hear from some good squirrel hunters of the best method to hunt these animals, especially in a country where they are scarce and quite wild. I have been hunting several times lately, and the last time I tried a new plan, which proved all right. I sat down and waited till I saw or heard a squirrel. If I had been walking around I should probably have frightened them and the chances are I should not even have seen one.

Fred C. Haist, Anita, Iowa.

ANSWER.

You should not kill gray squirrels or fox squirrels at any time. They have become so scarce and are so seriously threatened with complete extermination in all farming districts that all sportsmen should henceforth declare them pets instead of game animals and do everything possible to preserve them. They are among the most beautiful and interesting of all the small mammals of this country. The rapid encroachment of civilization on the forests, the rapid growth of public taste for outdoor sports and the thoughtlessness and greed of most shooters have doomed these innocent creatures. It is now the duty of all nature lovers and all sympathetic sportsmen to come to their rescue.—EDITOR.

CAPE COD NOTES.

For a number of years shore birds have been decreasing in number on Cape Cod, but last year they were fairly abundant. Near my camp at Sandwich marshes I saw a flock of about 200 golden plover, a thing not seen there in 10 years or more. Curlew were more plentiful than ever before. During the years of scarcity large flocks of golden plover were observed far out at sea, flying southward. They avoided the cape and Nantucket, probably to dodge the pot hunters who haunt these parts. At Nantucket dough birds used to be killed in large numbers. I have hunted the best grounds on the cape 10 years, yet have never seen a dough bird. They were worth money and were exterminated. There was a large spring flight of beetlehead and yellow legs, but they did not return in equal numbers. I would protect all kinds of hore birds at all times for the next 5 years. If all the States on the Atlantic Coast would protect these birds for 5 years the good old days of flights and fun would surely return. I believe in uniform laws, in all the Coast States at least. I would prohibit Spring shooting and the sale of game and have November and December constitute the open season for grouse, quail and woodcock.

E. E. P., Eastham, Mass.

BELGIANS INCREASING.

The Belgian hares, or common English wild rabbits, burrow in the ground. They dig their own burrows and do not have to use old prairie dog or coyote holes. They come out to feed in the early morning and about sundown; the rest of the time they are underground. These rabbits have increased here enormously of late years, although the occupier of a piece of land, as well as the owner, has the right to shoot them. The coyotes, which possibly might keep rabbits from increasing too quickly, are killed for the bounty. While the rabbit is a novelty they may command fair prices, i. e., 25 cents, dressed; but when they are numerous I don't suppose they will bring more than 5 cents each. Common rabbits, i. e., Belgian hares, retail at 12 cents in England. To get any sport with them ferrets must be used to drive them out. I fully expect the time will come within 15 years when this rabbit will be a pest in California. R. L. Montague,
Oroville, Cal.

Until that time no one should use ferrets on them. The ferret is the servant of the game hog, and no decent sportsman should ever go into partnership with either.—Editor.

L. A. S. STOPS ILLEGAL SHOOTING.

I am happy to say that owing to the untiring, eternal vigilance of sportsmen throughout this country illegal bird shooting has been stopped. Have heard of only one breach of the law. Reliable persons tell me that certain aforetime market hunters did no shooting last summer, because there was no market for birds at Saratoga. The boys have gone at the root of the matter, and by frightening the club houses and dealers, have put a quietus on hunting. This result the State Fish and Game Commission was never able to accomplish, and, in my opinion, never dared try. The credit is due entirely to L. A. S. members and a few other men who are not, but ought to be, members. Among the latter is D. H. Hall, owner of the Oaks, Cossayuna lake, who, although across the river in the next county, is interested in game protection here. He keeps a house patronized by wealthy bass fishermen and bird shooters. He rigidly observes the game laws and requires his patrons to do the same. If we can continue the present condition of things 2 or 3 years, ruffed grouse will rapidly increase in this section. J. D. H., Schuylerville, N. Y.

GAME INCREASING IN MASSACHUSETTS.

Game is plentiful here. I saw several deer last summer. The law protects them until 1903. Grouse, rabbits and foxes are also plentiful. There should be a bounty of 50 cents to $1 placed on foxes and game would increase rapidly. We have game wardens here, but they are not of the right kind. They allow certain people to hunt or fish in close season. Our trout law is wrong. It prohibits catching any trout under 6 inches, and this year the open season is May 1 to September 1. Instead of the 6 inch clause the season should have been shortened; lots of the short fish caught are so much hurt by the hook that they die if put back in the water.

There are game hogs here as well as in other places. I showed one a copy of Recreation a short time ago and he happened to turn to a page on which one of his kind was roasted. After reading he said there was nothing in the magazine he cared for. He said, "We have such damned game laws a man can't shoot any game, and if he does he can't sell it without getting pinched." W. H. Turner,
Monroe, Mass.

ALASKAN BEARS.

In July Recreation, which reached me at Nome, I find a request for information about the bears of Southeastern Alaska. There are found the common black bear and the large brown bear, commonly called cinnamon bear. I know of no others on the islands. On the mainland near are found what local hunters call silvertip and baldface bears. I believe them varieties of the cinnamon. Over the glaciers near Yakutat roams the blue, or glacier, bear of the Mt. St. Elias region, an animal smaller than the black bear.

I shall spend 2 months collecting curios along the coast between Yukon and Kuskkokwim rivers. Having a phonograph with me I hope to obtain records of the songs and stories of an interesting but fast vanishing people.

L. L. Bales, Alaska Guide,
St. Michales, Alaska.

GAME NOTES.

Recreation is the best sportsmen's magazine published. I live in Yonkers, 15 miles out of New York City, and although so short a distance from town game is plentiful. I do a good deal of shooting; that is, I shoot whatever I think is worth while and lawful. Within 10 minutes' walk from one of our streets there is a swamp and there, a week ago, we killed 6 woodcock in 2 days. How is that? Does it not speak well for game protection? I am much interested in all sorts of sports and read every word of your valuable magazine. There are also several trout brooks around here. Last summer one of our club members caught a trout weighing 1 pound and 10 ounces. I hope you will continue to succeed in your fight against game hogs.

Samuel G. Cooper, Yonkers, N. Y.

Eleven property owners of the town of Woodstock, who own over 2,000 acres each, have posted notices that any person hunting on their lands will be a trespasser. It has made the crack shots who visit Woodstock to shoot woodcock, quail and grouse look serious.—Kingston (N. Y.) *Daily Leader*.

The crack shots spoken of above are mostly game hogs or pot hunters in the Western part of the town. I have had over 2,000 more acres posted and we are going to protect quails and other birds if it is possible. There is a flock of 15 or 18 quails that makes its headquarters near our house. I am going to bait them and see if I can get them to feed with the chickens. I am sure quails are being shot before the season by rabbit and squirrel hunters. If we could have a uniform season for all game it would be a good thing.

W. S. Mead, Woodstock, N. Y.

London.—Sir Harry Hamilton Johnston, Special Commissioner for the Uganda Protectorate, has returned to London after an absence of 2 years. He brings stories of Uganda rivaling any traveler's tales of Darkest Africa. Sir Harry relates that the country surrounding Moantelgon is totally depopulated, as a result of intertribal wars, and is consequently marvellously stocked with big game as tame as English park deer. Zebras and antelopes can be approached to within 10 yards, and there is no sport in killing them. Elephants and rhinoceroses are also abundant, and, according to Sir Harry, lions in Uganda are too busy eating hartebeeste to notice a passing caravan. The prehistoric giraffe has been discovered in this country by the Commissioner, who proposes to maintain the region referred to as a national park He photographed a race of ape men in the Congo forest differing entirely from Stanley's pigmies, and secured phonograph records of their language and music. Sir Harry says that 12 varieties of rubber trees are found in that country in inexhaustible supply.—Exchange.

One morning last July, Dr. P., of this city, and I went torcaz shooting in the manglares, at the mouth of the Rio Caña, 3 miles from Trinidad. We stationed ourselves on a sandy beach, and in less than an hour shot 12 torcaces as they passed over us to their feeding grounds. It was great sport. Quails are abundant; their call is heard everywhere. In May a flock of bobolinks, or reedbirds, in full summer plumage, appeared in this vicinity. Immediately men and boys with trap cages and bird lime, scattered themselves all over the country. Many birds were caught. I bought 2 after considerable trouble for $2 each. They are handsome birds and sing beautifully.

O. A. Fischer,
Trinidad, Cuba.

Some folks want a cannon when they hunt grizzly, but all they really need is a little grit. My partner and I have about 2,000 sheep on the range. A grizzly came to camp and killed 5 of them. Next morning we started out to get even. My partner carried our only gun, a 32-20 Winchester. Our dogs followed the trail into a gulch, and when we caught up with them they had 2 grizzlies at bay. A single shot from the little gun killed one bear instantly. Then the lever got locked in some way. The other bear had our best dog down. My partner went in with his knife and killed the brute, receiving 3 bad scratches in the mix-up. Bear are much too plentiful here.

Herder, Grant's Pass, Ida.

Game in the upper peninsula is not as plentiful as formerly. In this section it consists chiefly of rabbits, with a few grouse and fewer ducks. I live on the shore of Green bay and see great flights of ducks, but as there is nothing for them to feed on here they do not stop. The deer allowance has been cut down to 3; one of the best moves Michigan's legislature ever made. There was great slaughter of deer last season, mostly around Floodwood and Balsam, 90 miles from here. The shores of Green Bay north of Menominee afford splendid camping grounds, and a prettier spot could not be found

Gilbert Taylor, Menominee, Mich.

The law is enforced in this section of Montana. Deputy warden followed me 100 miles to see that I had a license to hunt. Good work! An elk came to camp a week ago, 6 points, and the meat is now prime. Sheep are in evidence in Montana, but are protected. Missed a dandy herd just across the line, but hope to get one later. Trout here are plentiful and grouse abundant. Deer tracks are numerous; the animals are probably lower down now. All sorts of game passes here, including bear and moose. Charles Marble is proving a good, careful guide.

T. P. Berens, M. D.,
Salesville, Mont.

Quails are exceedingly plentiful. I have counted broods of 20 young birds.

Cotton tails are here in countless numbers and jack rabbits may be found behind every sage bush.

Of larger game, we have coyotes, coons, deer, antelope and a few mountain lions and bear, to say nothing of bobcats, or lynx, that are the bane of the ranchero who has sheep or chickens.

This seems an exceptionally good year for game of all kinds.

W. W. Schmidt,
Las Cruces, N. M.

Around Fort Mitchell we have turkeys, quails, squirrels, rabbits and some deer. Eight or 10 of the latter were killed near here last fall. Turkeys are more numerous than they have been in years. We have also a fair number of woodcock. Have been doing my best to protect game and have

made many enemies by killing hounds on my farm. I had a most enjoyable hunt last fall with 3 friends from the North. We were out 8 days and bagged a number of turkeys. R. A. Thompson,
Fort Mitchell, Va.

I have been a reader of Recreation for 3 years and my love for it increases as each issue is received. Owing to the enactment of strict game laws in this State all kinds of game is increasing. The work of the League is needed, however, as we are not without hunters with swinish propensities. But with uniform laws for the protection of game a sufficient amount can be indefinitely preserved. Long live Recreation, the sportsmen's magazine.
Edw. McGaffick, Salem, O.

Game here wintered better than for a number of years. Elk are increasing; so, also, are sheep. Black tail deer are fairly plentiful, and there are a few white tail in this section. Antelope are gone entirely from these parts. Moose are scarce, but still there are a few. Trout are abundant and gamey. Blue grouse are plentiful. Owing to your efforts game is bound to increase; Recreation is heard from on all sides. H. H. Todel, Bozeman, Mont.

You are doing good work and I wish you success. We seem to have more song birds this season than for a long time past. There are fewer English sparrows, for which we are thankful. There is little game near Boston except for those who know the country thoroughly. They can do fairly well. There is a good supply of bass, pickerel and perch to be had by those who are patient and skillful.
A. L. Belcher, Reading, Mass.

I have been a reader of Recreation nearly 2 years, and can most heartily say it is the best sportsman's periodical I ever read. Before I began to read your magazine I was more or less reckless as to the quantity of game I killed, but it has entirely changed my views. I used to kill 30 or 40 quails in a morning's hunt, but now am satisfied with a dozen a day.
Frank Mims, Mobley, Ga.

In reply to G. C. Edward, Buffalo, Ill., in September Recreation, as to sowing wild rice: It should not be sown in less than 3 feet of water. Sow in the fall on muddy bottom. Two years ago I sowed a small lake near here with Canada wild rice. It is coming up nicely now. Rice should be soaked 24 hours before planting.
F. S. Wilson,
Elk Rapids, Mich.

This has been one of the best seasons for game birds we have had in years. Prairie chickens are plentiful; coveys run 8 to 20 birds each. Red Head, Teal and Mallard afford splendid shooting. Heron Lake is full of duck feed and large numbers of ducks hatch there. There has been little illegal shooting so far.
R. C. Darr, Lakefield, Minn.

The synopsis of Michigan's game law in September Recreation contains an error. The open time on grouse, quail and woodcock is October 20 to November 30; not October 1 to November 30, as stated. Quails are abundant here but, as we have no local warden, many birds were shot out of season.
John Grey, Augusta, Mich.

Game is well protected in this State. Deer and moose are plentiful North of this place. A guest at this hotel is going to his camp in the woods, taking a camera instead of a gun, as formerly. Recreation is having its effect.
John McGahie,
Greenville, Me.

The game laws of Iowa are doing some good, it seems, although they are not enforced as strictly as they should be. Quails and chickens are on the increase, as, also, are all other birds. Fruit tree growers are beginning to see the necessity of protecting birds. M. A. Stempel,
Macedonia, Iowa.

Hunting season on wild fowl opened here August 15, and prospects are good. We have blue, ruffed and sharp tail grouse here. A few Bob White quails have been introduced and seem to do well. Large game is abundant in the mountains.
D. E. Danby, Rathdrum, Ida.

Keep after the game hogs until they are ashamed. Your position and the manner in which you handle them are admirable.
W. D. Wells, Brooklyn, N. Y.

A yearly subscription to Recreation is one of the most practical and useful presents you could possibly give a man or a boy who is interested in nature study, fishing, hunting, or amateur photography.

All boys instinctively love the woods. Recreation teaches them to love and to study the birds and the animals to be found there. If you would have your son, your brother, your husband, or your sweetheart interested in nature let him read Recreation. It costs only $1 a year, and would make him happy 12 times a year.

FISH AND FISHING.

IN DARKEST NEW ENGLAND.

A subscriber sent me the following clipping:

Mrs. N. F. Prescott reports enjoying a fishing trip in the Granite State. Only 2 or 3 days were spent in camp, and 314 trout were caught by Mr. and Mrs. Geo. Gilman and herself.

I wrote Mrs. Prescott for confirmation of this report, and append her reply:

On my return from the White mountains I found your letter. I was much surprised to hear my fish story had been put in print, but will confess the statement is true. I was sojourning at Campton, N. H. We fished 2 days and camped 2 nights. I do not know the names of the streams we fished.
Mrs. N. F. Prescott,
Malden, Mass.

Wonders never cease. Here are 3 people living in New England, which is looked on as a seat of learning, culture and many other things that good people strive for; yet they seem densely ignorant when it comes to a question of taking fish. They took over 100 trout, each, in 2 days. Of course the trout were fingerlings, but that makes the offence all the more serious. It is more than likely that many of the fish were under the legal length, and that these people violated the State law. In fact, it would be almost impossible to take 100 trout from any stream in New England, within a week's fishing, that would measure over 6 inches. It is safe to say that 75 per cent. of the trout these people caught should have been promptly returned to the water and allowed to grow to a reasonable size. Instead of this, it seems that Mr. Gilman and these 2 ladies kept all the fish to swell their count. At least, nothing is said either in the printed report or in Mrs. Prescott's letter, about having returned any of them to the water. I deeply regret that some game warden did not happen along about the time these people were finishing their record to examine the contents of their fish baskets. However, Mr. Gilman and his party have now to face the public and answer to the charge of having caught 3 times as many trout as they should have caught.—Editor.

MONTANA LAW DEFECTIVE.

It was the hope of those who deplore the destruction of those noble trout streams, the Yellowstone and the Rocky Fork, that the law to take effect Nov. 1 would put a stop to their defilement by coal dust, and that in the course of years they would be restored to purity. However, a perusal of the law proves this hope to be vain. It is expressly provided in the law that it shall not interfere with coal washing where the refuse is turned into the streams. That being the case the law need not have cumbered the statute books, as it is absolutely farcical and useless. The Yellowstone river varies from a murky color to an inky blackness. The source of defilement is an inky deluge from the coal washings, and within a mile it is thoroughly incorporated. Being a fine dust the coal washings float with the river for probably 200 miles. At Columbus the water is so thick with it that the river is ruined as a trout stream. At Billings the Horr washings make the river perceptibly blacker than Clarke's Fork after it receives the contribution from Red Lodge.

The slack from Red Lodge has not been quite so destructive as the finer dust from Horr, but under the new law it will be worse than before. The coarse slack thrown in at Red Lodge did not float far, but is packed between the boulders like a coarse black powder. That was bad enough to destroy a splendid trout stream, but now the filth will be more thoroughly incorporated with the water. When the question was asked what the coal company will do with their waste, the reply was:

"Oh they will just wash it in. They have put up a fine washing plant."

The Horr nuisance has destroyed 175 miles of the finest trout stream on the continent. The Red Lodge plant has ruined about 80 miles of another stream inferior only in size. The finest trout streams left in Eastern Montana are the Stillwater and the Boulder rivers, both rising in the Big Snowies, and putting into the Yellowstone from the South. There is coal along both of these rivers and their tributaries, and within a few years they too will be destroyed unless the next Legislature shall enact an honest measure for the suppression of the nuisance.

The defilement of these rivers is a serious loss to the States, not only in depriving the citizens of the greatest attractions for their summer outings, but of the inducements for all outside sportsmen to visit Montana; and all this is to save the coal companies a little preliminary expense and inconvenience. The sight of the Yellowstone now is enough to make angels weep. It is a beastly shame.—Independent.

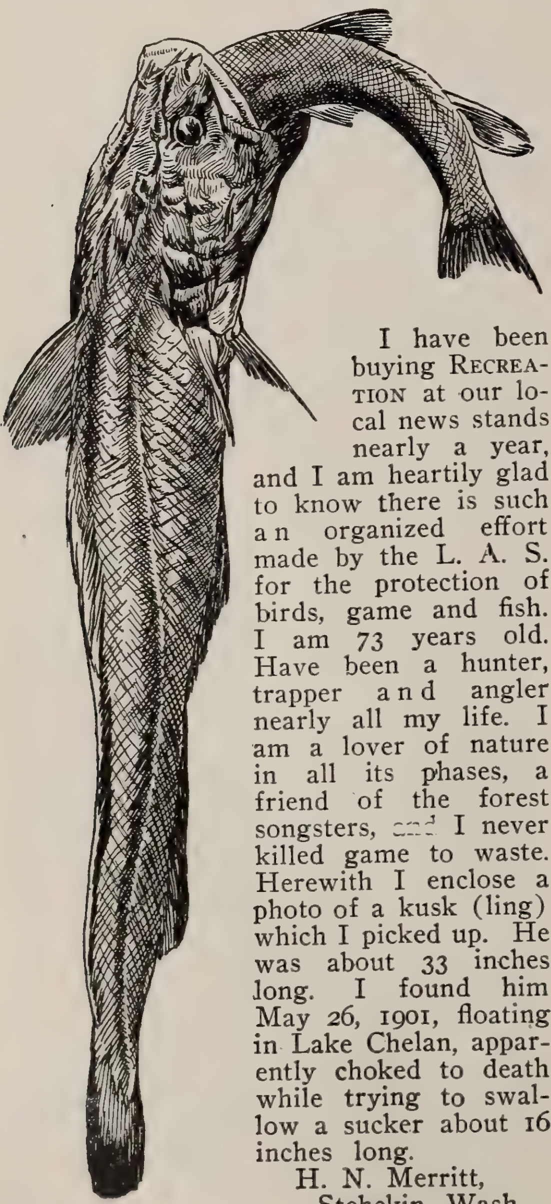
UP TO THE COMMISSIONERS.

The Dodge Manufacturing Company, of this borough, makers of clothes pins, dump the refuse of their plant, such as chips, shavings, sawdust, etc., into Mill Creek, a trout stocked stream. The Borough Council and the Borough Solicitor have each in turn tried to prevail on the company to cease doing so, but to no purpose, and the company continues to grow bolder and bolder. The refuse sinks, as soon as it becomes water-soaked, to the bottom of the stream, and there lies to a depth of one to 3 feet. Is there not some action we can take in the name of the League of American Sportsmen to prevent this? Thanking you in advance for your advice, I am
Ira L. Murphy,
League Warden for Potter County, Pa.

This is the same old story. The sportsmen of the country are so slow in coming into the League that we are without funds to prosecute any cases outside of the city. Even here, all money used in these cases comes out of my pocket.

Your State has a Fish Commission, and this commission has money at its command with which to enforce the fish laws. These men could stop the manufacturing company from dumping refuse into the stream in 10 days if they saw fit to act, but unfortunately they are politicians, and as a rule ignore appeals made to them by sportsmen, no matter from what part of the State they come. The only redress I can suggest is that a general demand should be made on the Governor for the removal of these men and for filling their places with live, energetic sportsmen It is not likely your fish laws will be enforced to any considerable extent until these men are forced to seek other employment.--EDITOR.

BIT OFF MORE THAN HE COULD SWALLOW.



I have been buying RECREATION at our local news stands nearly a year, and I am heartily glad to know there is such an organized effort made by the L. A. S. for the protection of birds, game and fish. I am 73 years old. Have been a hunter, trapper and angler nearly all my life. I am a lover of nature in all its phases, a friend of the forest songsters, and I never killed game to waste. Herewith I enclose a photo of a kusk (ling) which I picked up. He was about 33 inches long. I found him May 26, 1901, floating in Lake Chelan, apparently choked to death while trying to swallow a sucker about 16 inches long.

H. N. Merritt,
Stehekin, Wash.

PHILADELPHIA AND NEW YORK PLEASE NOTICE.

Last summer the city of Baltimore passed an ordinance forbidding the sale of striped bass under half a pound and white perch under ¼ pound in weight. The commission fish dealers in Baltimore made an arrangement with the local fish warden, by which they were not to be fined if their consignees shipped fish under weight, but the fish were to be returned to their original owner. The dealers then sent notices to that effect to all our buyers and shippers here. This is how it works: Baltimore gets all the large, fine, eatable fish, and New York and Philadelphia, our other 2 principal markets, get all the scrap fish and underweights. Boston, our other fish market, gets nothing but extra choice fish, as it is worse than useless to send scrap fish there. The people will not buy them at any price. Of course, in a small place like Boston, it is easy to educate the people to this standard, but in cities like New York or Philadelphia it is too much work. It seems to me, however, it would be much easier to pass a city ordinance than a State law. If an ordinance similar to that of Baltimore were passed in Philadelphia and New York, and our shippers notified it would be enforced, those cities would then no longer get the worst end of the deal, and the little fish would be turned loose and allowed to reach maturity. This would make it better both for fisherman and consumer. The market is the place to regulate all game and fish laws, and it is almost useless to bother with anything else.

We are having a great fly of fowl now, more than I have seen for several seasons. Some, of course, stop with us; but the majority have gone farther South.

A. S. Doane, Waterlily, N. C.

LAW-BREAKING FARMERS.

One night in October last Deputy Game Warden Wallace Smith, of Logansport, Ind., with 2 assistants, undertook to arrest several farmers who were spearing fish in the river a short distance below that city. The warden found the men in canoes in the middle of the stream and ordered them to come ashore and surrender. The men headed their canoes toward the shore at once and started in, but when they neared the shore one of the fishermen drew a revolver and fired at the warden. The officers returned the fire and several shots were exchanged in rapid succession, but without effect. Meantime the officers turned to get under cover in the woods and were met with a volley of bird shot and bullets from several pals of the fishermen, who were hiding among the trees. A lively skirmish ensued with the bushwhackers, and the officers ran for their team, jumped into their wagon and started to drive away. The farmers continued the firing and the warden fired at one man at short range and brought him down. At last accounts this man was dying, and it is to be hoped he is well planted by this time. Unfortunately the wardens were unable to identify any of the law-breakers. They saw the faces of those in the canoe by the torchlight, but that was not strong enough to enable the wardens to recognize the men. The farmers have threatened for some time past to make trouble for any warden who might interfere with what they term their rights. On the other hand, Warden Smith is determined to break up this unlawful fishing. It will be interesting to watch the fight and see how it may come out.

A WARDEN'S STRANGE DEFENSE.

Arthur Chase, Perley Stevens and I went fishing September 10. While at the pond Chase shot a duck. He was arrested by Game Warden Arthur Salmon, of Maple, Vt., and fined $10 and costs. After the case was settled I talked with the warden, and, among other things, asked if he had ever arrested anyone for taking undersized trout. He replied that he had not, and said any warden taking up such a case would be kicked out of the county. He added that he would not have bothered Chase if the whole town had not been at him for letting 2 fellows shoot ducks on the same pond the previous week.

D. R. Logan,
East Craftsbury, Vt.

This is a strange line of defense for a game warden to put up to cover an official act, and I should like to know what Warden Arthur Salmon has to say in explanation of his strange argument, not to call it by a harsher name.—EDITOR.

WELCOME TO THE PEN.

In reply to an inquiry as to the truth of an item lately printed in the Seattle (Wash.) Times, I received the following:

Your information is nearly correct. T. Bowes, A. Van Epps and I caught over 2,000 trout in 3½ days. The trout, which were rainbow and cut-throat, were hooked with flies in the Icicle river, on the Eastern slope of the Cascade range. None of the fish were wasted, but salted down and given to friends. A. Van Epps has an acknowledged record of 700 trout in one day, caught in the same river.

W. M. Inglis, Seattle, Wash.

All right, Inglis. Step right into the fish hog pen and take your companions with you. You are welcome to the muckiest corner you can find. Van Epps, who is apparently the big boar of the bunch, may stick his head in the drain while I broadcast his record.—EDITOR.

NIBBLES.

Should like to know if any readers of RECREATION have had trouble with the Bristol steel rod. I bought one before going away last summer. In pulling the line off the reel it snapped the tip. It was bent but little at the time of unreeling. I think it must have been a defective rod.

C. R. B., New York City.

The tip undoubtedly had a flaw in it which was overlooked by the workman when putting the rod together, and by the inspector. If you will report the case to the Horton Mfg. Co., Bristol, Conn., they will doubtless send you a new tip and make no charge for it.—EDITOR.

A subscriber at Victoria, British Columbia, sent me a cut and an item clipped from the Victoria Colonist. The item states that John Longmaid, of Helena, Mont., caught during his visit to Victoria 328 trout. I hold Longmaid's acknowledgment of the truth of the story; he adds that his best day's catch was 29 fish, weighing in all 61 pounds. The cut mentioned shows a white-bearded individual in a chesty pose beside a lot of fish. It is written: "With age cometh wisdom; and with grey hairs discretion." But there are exceptions. A discreet old fish hog nowadays would not send his picture to the papers.—EDITOR.

A friend and I made a trip last summer to Point Fortune, Quebec, 50 miles from Montreal. While there we caught 35 fish, mostly pike and bass. We hooked many more, but threw them back, keeping no pike under 12 inches and no bass under 7. We saw an old Frenchman fishing. He had a box full of fish, and all small ones he caught he threw ashore. He said it was bad luck to put them back in the water, and got angry when we tried to argue with him. We heard a fellow who had been to St. Margaret boast that he had caught 250 trout in 2 days.

G. M. Miller,
Montreal, Can.

That ad. put in RECREATION a few years ago has kept my cottages rented ever since. I have built 2 more, and they are rented, too; so, for goodness' sake, don't tell anybody I have any cottages to rent.

There are some good fish left yet in Lake George, but not every amateur can catch them. Most of the large fish wear a rich and varied collection of decorations in the way of fancy spoons, flies, and all that sort of thing, that they have captured from men who thought they knew just how the thing was done.

Silas H. Paine, New York City.

Mr. Valentine Raeth, of Milwaukee, has been appointed a State game warden. He is vice-president of the Wisconsin Game Protective Association and has done a great deal for the protection of game and fish. The first time he was out he confiscated a 50 foot net, which was used for unlawful fishing. On his second trip he arrested a man from Waupun for hunting ducks without a license, at Fox Lake. Mr. Raeth will make it hot for game and fish hogs in this State.

Aug. Plambeck,
Milwaukee, Wis.

C. L. Bering landed a 5 foot 7 inch tarpon, weighing 90 pounds, after a lively fight of 55 minutes. With a fierce rush the fish started up the channel with flying leaps, and after running out some 300 feet of line changed his course and came back to deep water. The boat's course was likewise changed, and after an hour's following and leading he was landed, the first of the season.—Houston (Tex.) Daily Herald.

Charles Kirkbride and I have just returned from a 3 days' fishing trip to Lewiston Reservoir. We caught 150 black bass, 137 rock bass and any number of perch. There is plenty of sport there.

A. Wilson, Findley, O.

You are either an egregious liar or a dirty, low down sneak, and if you are telling the truth, your companion is of the same breed.—Editor.

One Saturday in August a friend and I went to Chamberlain's Lake, 6 miles West of here, to shoot frogs. We took a frog spear and torch, but the dock leaves stood so high and thickly that it was impossible to use the spear. With a rifle we killed 22 large frogs. Frog shooting requires a great deal of patience and caution, and is really excellent sport.

P. H. Woolman, South Bend, Ind.

In September Recreation Kit Clark says black bass are more gamy than trout. It is my experience that a half pound trout will fight harder than any bass that swims. The brook trout is the king of fishes in my opinion.

F. T. Wilson.
Elk Rapids, Mich.

Captain Bingham and Major F. L. Hays, who fished at Mackinaw last season, caught in 2 weeks about 200 fish and about 65 of that number were fine bass.—Sunday Review, Decatur, Ill.

I wrote these men, asking if the report was true, but received no reply.

W. E. and Fred Terrill made a record as fishermen a few days ago. They fished one day in Stowe, Vt., and secured 339 trout, which weighed 27 pounds.—*Exchange.*

And thus have the Terrills shown their bristles.—Editor.

A black bass was caught in one of the lakes near here, August 6, which weighed between 9 and 10 pounds. It was seen by hundreds of people.

L. A. S.,
Belding, Mich.

A SUGGESTION FOR 1902.

A yearly subscription to Recreation furnishes one of the most delightful, instructive, entertaining presents you can possibly give a man or boy who is interested in nature, in fishing, shooting, amateur photography; or, who is fond of the woods, the fields, the mountains, the lakes or the rivers.

Many of the presents which people give their friends afford pleasure only for a few days, or weeks. A subscription to Recreation means solid comfort a whole year. It reminds your friend 12 times during the year of your kindness and generosity. There are many men and women who for 5 years past have annually sent in long lists of names of friends, accompanied with a check, in order that these friends might be made happy a whole year. Would it not be well for you to adopt this plan?

Try it and see how grateful the recipient will be.

The boat you had the Racine Boat Manufacturing Co. send me as a premium is the prettiest one I have ever seen on the Conemaugh river. It is neat and fine in every way and I can not understand how you can give such a valuable premium for 25 subscribers to your magazine, as the boat alone is worth $25. The Racine Boat Company certainly understands its business, and I will not hesitate one minute in recommending it to anyone who intends buying anything in its line. Everybody who sees the boat is delighted with it, and all who have tried it say it is like a duck on the water. They all wonder how you can give such a valuable premium for so few subscribers.

G. E. Welshons,
Pitcairn, Pa.

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

THEY DEFEND THE SAVAGE.

New York City.

Editor Recreation:

I do not agree with M. L. Parshall, of Chesaning, Mich., as to what he says about the Savage rifle. I will give you the experience of the last 2 notches on my Savage stock. My guide and I were going up Fish river, Me., in a canoe, and as we came around a bend we saw 2 deer, about 75 yards from the boat. I fired, and the guide remarked that I had missed, as he had seen the splash of the bullet in the water on the opposite side of the deer. The deer turned and ran into the woods. We paddled up to where the deer had entered the woods and got out. At the place where the deer was standing when shot was a lot of the contents of his entrails scattered on the ground. Neither of us knew at that time whether my bullet or the deer had dropped the contents. About 10 feet farther we found blood and commenced to trail. At 40 feet we found a part, if not the entire, entrails hanging on a bush 2 or 3 feet from the ground, and at 75 yards we found the deer, lying down to die. The deer was about 9 months or a year old. The spots were just going off. The bullet, a soft nose, went through the belly without touching a bone, making a hole that let the entrails out, and in which I could have put my wrist. The bullet went clear through, striking the water, which the guide had seen.

Second notch: I shot a doe. The ball struck in her hind quarters about 3 or 4 inches from the top of her back. She never moved from her tracks. On inspection, I found the ball had struck the back bone, shot from the side, and instead of the bullet "flying into bits," as Mr. Parshall says, the bone flew into bits, and the bullet kept going until it went through and out on the other side.

The flesh of both of the deer was lacerated 4 and 5 inches around the bullet hole, like jelly. The last deer was old and tough. In fact, we were unable to eat the meat on account of its being so tough. Of course I did not know that or I should not have shot her. In camp one of the guides wanted to know what I had done to the meat. The guide who was with me was not a believer in the small bore until he saw these 2 deer shot. When we came out with the first deer, knowing then that we had struck it, we examined the contents scattered on the ground, and satisfied ourselves that the bullet had knocked them out. There was an experience in both flesh and bone.

Terry Smith.

Ironwood, Mich.

Editor Recreation:

Recreation for October contains an article entitled "A Fault of the Savage Rifle," written by M. L. Parshall, of Chesaning, Mich. My experience with the Savage, as well as with other rifles, has been considerable, and I have met with the best of results with the Savage. Judging from what Mr. Parshall says, I suggest that perhaps the cartridge used was at fault, rather than the gun. He admits the velocity and trajectory of the Savage are all that can be desired, but adds that its penetrating power will not even compare with that of a 38-40.

Standing at a distance of 110 yards, I have shot both soft nose and wire wound bullets through a 6-inch, dry maple plank, with the Savage. Like Mr. Parshall, I have seen a deer shot squarely in the shoulder; but instead of the bullet flattening against the bone, it came out on the opposite side, leaving a hole which measured fully 7 inches across. In another instance, the bullet entered the back of the head and came out between the eyes, bringing most of the front of the head with it. I have also seen a deer shot in the back, just over the hips. The bullet followed the back bone a sufficient distance to splinter 7 or 8 vertebræ; drove some of the pieces of bone through the hide, and came out on the top of the shoulder. Soft nose bullets were used in the instances given.

Experience has taught me that where there is sufficient velocity, penetration will depend on the weight of the bullet. If the bullet flies to pieces on coming in contact with a hard substance, the fault is with the carriage rather than with the rifle. I have used both Winchester and U. M. C. cartridges in the Savage with good results. The wire wound bullets manufactured at the National Projectile Works are good, and leave the gun clean; but should they rub one against another when being carried, the silk on the wire frays out, dust accumulates in it, and the bullet becomes too large for the chamber. I have found this so in using them with both the Savage and the Winchester.

In reloading Savage cartridges, I have obtained excellent results with the Laflin & Rand Rifle Smokeless, and think it the best smokeless powder made.

I have a Savage, a 30-30 Winchester and a Winchester shot gun; but the Savage is my pet. This is entirely unsolicited, but I like to see honor fall where honor is due. W. W. Prentice.

I notice Mr. M. L. Parshall, Chesaning, Mich., speaks of the fault of the Savage rifle, because the bullets fly in pieces at short range. I am guessing he used U M. C. ammunition, as that same fault was found by both my companions in Colorado, and neither one used a Savage; while I used a Savage and Winchester ammunition, and had but one bullet break, that being the closest standing shot I had while there. The bullet struck at the point of shoulder, smashing the bone and tearing the jacket so the lead left it. One small piece of lead lodged on the skin near the root of the tail, the balance of the bullet passing on and out of the deer. I saved the piece, as it was something of a curiosity, being lead that stayed in the same from a Savage. One of my companions said his 30-30 would scarcely ever shoot through a deer within 100 yards if it struck a bone on entering. I found the jacket, minus about ¼, midway between entering and exit of bullet. I know the Savage people recommend the U. M. C. ammunition, but the Winchester ammunition does well enough for me.

Now, I want to learn. Is there any semi-smokeless powder that one can use in strong loads in brass shot gun shells, and that will not swell and spoil the shells? I have a gun bored expressly for brass, so I can not use paper shells. I always used American wood powder. When they stopped the manufacture of powder I bought what I thought would last me while I lived, and may be it will, but it is getting low. I don't wish to throw my Lefever away and don't want it rebored to a 10 gauge; so if there are any readers of the magazine that have had satisfaction, I wish they would give me the benefit of their experience.

Stubb, Orwell, Ohio.

In October Recreation M. S. Parshall writes about a fancied fault of the Savage rifle. Now, I am the proud possessor of a Savage, and have killed moose, elk, deer and bear with it. Of the last, black, brown, grizzly and polar; and I have yet to discover a fault in the rifle.

In the same letter Mr. Parshall wants to know how far to hold ahead of a deer running at 100 yards. That depends on how fast the deer runs. The bullet of the 303 Savage travels about 2,000 feet a second, and the time it takes to go 100 yards is about 1-6 of a second. If the deer travels 20 feet a second, for example, in 1-6 of a second it would only travel 1-6 of 20 feet, which is 3 1-3 feet; the distance it would be necessary to hold ahead.

J. Wills, Seattle, Wash.

DEFENDS PETERS' GOODS.

Plainwell, Mich

Editor Recreation:

With your permission, I should like to say a few words, unsolicited, through Recreation, in defense of the goods manufactured by the Peters Cartridge Company. For several months past your subscribers have read a number of articles, published by you, which, if true, would convince them that this company is placing in the market ammunition of little or no value, but it happens that many of us have been using at least a portion of these goods, and from experience know that the writers have made many mis-statements; not intentionally, of course, but through a lack of that good judgment and sound discretion which it is necessary for a person to have before criticising the acts and doings of another. It is impossible to remember the names of the correspondents, but one stated that the .22 short smokeless cartridges, when fired, did not carry up as they should. Another found fault because so many of them missed fire. I am not sure whether he referred to the smokeless or the semi-smokeless. In your November number John C. Cracknell, of Oakland, Cal., says emphatically that the Peters cartridge, .22 long, both smokeless and semi-smokeless, is a failure. He is just as emphatic in saying that the Remington gun of a certain grade has the fewest defects of any gun made in America, and that for closeness of pattern and penetration it is inimitable. Now, we all know that the Remington people make a fine gun, and perhaps as good as is made; but when Mr. Cracknell makes the positive statement that it has the fewest defects of any American gun, and that for closeness of pattern and penetration it can not be equaled, he is making an assertion which your readers will at once see is not correct. It is merely a mistake of judgment on his part, and not intentional. He may be like a great many others who own a gun and think it is the best in the world. This is because they are wedded to their guns, and do not use any reason in making their assertions. We all know that there are other firms in the United States, whose names it is not necessary to mention, manufacturing shot guns which are as good as the Remington. Otherwise, why do so many professional and amateur shooters use them in preference to the Remington? Mr. Cracknell also states that the new U. M. C. .22 caliber smokeless cartridge is the only accurate .22 caliber smokeless on the market. There is another positive statement which your readers will also probably doubt to some extent. That this cartridge is accurate, no one will dispute, as the U. M. C. Company manufactures ammunition as nearly perfect as can be made. What I take exception to is the claim that it is the only accurate smokeless .22 on the market, as well as the further statements made by him against the Peters ammunition. If Mr. Cracknell wished to do justice to the Peters Company when firing 25 consecutive shots at a quarter inch center, why didn't he place his gun in a vise instead of taking a rest? It may be that when shooting from such a position with a cartridge in which he had, apparently, no confidence, he could not do so well as he did with the U. M. C. cartridge, and his gun may have wavered just before firing, as it certainly does with a great many shooters.

During the season, in a new single shot Winchester, I have fired about 1,300 rounds of the Peters .22 semi-smokeless short, and 300 rounds of the .22 long, not the long rifle. I never had one cartridge miss fire out of the bunch. As nearly as I could tell, from my experience both in the field and the gallery, all of each kind were of equal strength, and placed the bullet directly in the spot pointed at. I do not mean by this that I hit the mark every time, but when I did not it was neither the fault of the gun nor the cartridge, but of the man behind the gun. Of course, I do not shoot from a rest, and were I not able to shoot offhand I should not shoot in any other manner. So with Mr. Cracknell and the other critics; the fault has always been in the man and not in the gun or the ammunition. From experience we know that many of us are too prone to complain and find fault when the trouble is all with ourselves. For instance, a few weeks ago a young lady in my office, with my associate, went hunting. She used a Remington single barrel shot gun, with U. M. C. smokeless shells, loaded with Dupont smokeless powder. When she returned I found that 15 of the shells had missed fire. There was a splendid chance, through Recreation, to roast the manufacturer of the shells; but I had used several thousand of them in another gun and never found one which refused to explode, so we submitted the matter to our former gun dealer, who declared the heads of the shells were sunken. A straight edge soon disproved his theory, so of course there was another opportunity of abusing the Remington people for making a poor gun; but I insisted on the lock of the gun being taken apart, and the next day we were informed that the old oil in the lock had gummed and caused all the trouble. Such, no doubt, would be the similar experience of all the kickers if they would only use their heads a little more, and their pens a little less. We find these difficulties arising not only with the gun and its ammunition, but with rods and reels, and in fact with all our undertakings. If Mr. Cracknell wishes us to believe what he says about the Peters ammunition let him be more careful about the other statements made in his letter.

Mr. Truitt, one of our gun dealers here, tells me he has used, this season, 1,500 Peters semi-smokeless .22 short, and that they have given him entire satisfaction, as well as their 12-gauge shot gun ammunition.

I like your magazine very much, and would not be without it. In fact, a few years ago I discontinued the American Field and subscribed for Recreation.

If Mr. Harry Cranston will wipe out his rifle, after shooting it, with 5 or 6 oiled rags, or until the gun is perfectly clean, I think it will not rust. Then if he wishes he can wipe it dry, or leave it oiled. I like olive oil the best. Ed. J. Anderson.

THE MAUSER AND THE MAN.

Quite a discussion has run through the gun and ammunition department of Recreation relative to the value of the captured Mausers recently sold by the Government. One correspondent claimed they were only old junk, valuable merely as war souvenirs.

My experience is the opposite of that statement. For the benefit of several inquirers in our magazine, I beg to unfold my tale.

Last fall, on starting on a Western hunting trip, I bought 2 Spanish Mauser military carbines, 19 inch barrels, one a German model, 7 mm. box magazine, the other the Argentine model, 7.65 mm. Lee magazine. These I took with me. My reason for choosing the carbines was that they could be packed in my trunk. I also bought 100 rounds each of German cartridges for the 7 mm. and 100 U. M. C.'s for the 7.65 mm. The former were all defective, being split in the neck.

Before going into the woods I tried the guns on targets, and found them accurate and powerful. Notwithstanding the defectiveness of the German cartridges, they proved much the better ammunition. The U. M. C.'s invariably dropped the primers in the discharge, thus clogging the action. Besides, they were not nearly so powerful, nor were they so accurate.

I used the weapons for shooting deer, and found them in every way satisfactory. When the season closed I shipped them home.

Deciding at St. Louis to go farther South, I bought another Argentine model, with perfect German ammunition. Because of their great range, in trying these I nearly always removed the bullet from the shell, poured out ½ the powder, and then replaced the bullet. This was to guard against accidents which might attend their long flight.

In Wilton, Ark., I tried this carbine, and at 50 yards, with a full charge, it drove the bullet through a 16 inch green gum tree. The hole at the exit was scarcely larger or more ragged than at the entrance, showing that the force of the discharge was not nearly spent. Considering the toughness of the tree, the shot was remarkable, and proved that the weapon had not been rendered unserviceable.

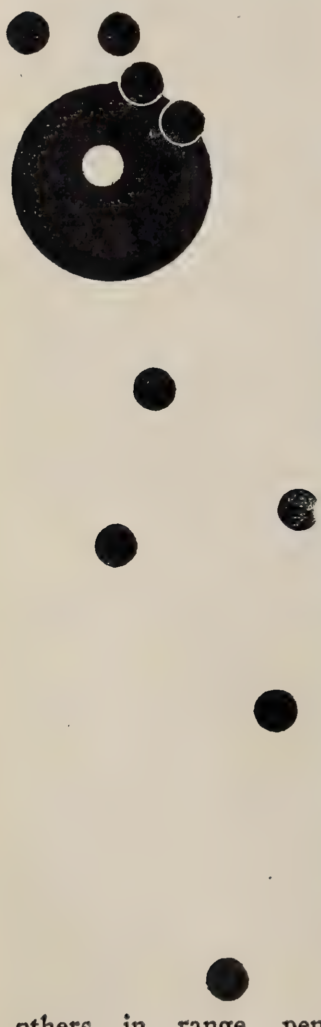
I have had an Infantry Mauser converted into a sporting rifle by altering the stock, and it is a beauty. The dealer who dressed it up for me showed it to a New York sportsman, who was so pleased with it that he bought 2 of them and had them altered to hunting models. I have not heard as to his experience with them.

I have another in military stock, which I shall not change; shall try it and report results.

E. E. Stokes, New York City.

U. M. C. VS. PETERS.

Judging from the gun and ammunition department, you have a great many readers who use the .22 calibre rifle. I send you target, 10 shots, made with 2 different makes of cartridges, distance 40 yards. I don't send it because it is an extra good one, but merely to show those readers of Recreation who are interested in .22 calibre rifles the difference between the cartridges. It was made with a Stevens' Ideal, using .22 long rifle cartridges. The upper 5 shots were made with the U. M. C. and the lower 5 with Peters cartridges. The sights were Lyman's combination in each case. In March Recreation Mr. Shiffer says of the Peters' cartridges: "They surpass all others in range, penetration and accuracy." Why does a cartridge that "surpasses all others in range, penetration and accuracy" fall 2 inches below another at 40 yards, 12 inches at 100 yards and 24 to 36 inches at 150 yards? Perhaps Mr. Shiffer can explain it. It is evident he never tested the 2 together or he would not have made the statement he did. He carries the idea, too, that the .22 long is more accurate than the .22 long rifle. That is another case in which his statement is incorrect. The .22 long can not be compared with the .22 long rifle, as regards accuracy. Why not give actual results after a thorough trial and not so much guess work?



A. M. Hare,
Bay City, Ore.

MARLIN CORRESPONDENCE.

I know nothing about the shooting qualities of the Marlin rifle. In fact, I always liked the Marlin rifle; but the Marlin people! Hear me! Two years ago a friend of mine was in the Maine woods, 2 days away from the nearest railroad and one day away from the nearest post office. To get to the post office was a day's trip with a canoe, 22 miles. He broke one of the springs in the lock of his Marlin. That was no fault of the rifle. He wrote to the Marlin people to send him another spring, and when he came out of the woods he would send the money, not knowing the amount. A polite letter came back, saying that on receipt of 30 cents they would send the spring, as they did not wish to make any little accounts. To send the 30 cents would have required a man, a canoe and 2 days, down and back, and then a man, a canoe and another 2 days, down and back, to get the spring, unless the man waited for it several days. There is no necessity to give names. The Marlin people can find my friend's letter on file if they keep files, or their letter, if they keep copies.

Terry Smith, New York City.

A box of guns from Wyeth Company, St. Joe, Mo., received by a dealer here, contains a pamphlet entitled "A Court Document," by Marlin. Have the last shot, old man, and if he can't stop you, don't you stop. The last few copies of Recreation contain just what Marlin deserves, and I for one would not use anything he could make after he has treated you so unfairly.

F. R. Fouch, Parma, Idaho.

I suppose you have seen the book the Marlin Arms Co. is sending to people round here, entitled "The Real and Original Game Hog Drawn by Himself." I think it will do the Marlin folks a lot of harm. I had decided to get a rifle of them, but should not think of doing so now. I hope you will prosper in your good work.

John R. Gillam, Cowansville, Quebec.

I had a Marlin repeating shot gun, but it was no good. It would choke up and would not work. It would not extract if the shells happened to be damp.

John A. Cooper, Deleware, Ohio.

16-GAUGE HIGHEST TYPE.

Noticing the inquiry of Mr. Jones, of Slate Hill, Pa., in Recreation some time ago, relative to the power of a 16 gauge gun, I beg to state my experience with that gun. For 25 years I used a 12 gauge gun, commencing with the old lift action Parker and following with W. & C. Scott, Greener, Schaefer and Lefever, all in 12 gauge. With the advent of nitro powders I saw no use for the 7½ and 8 pound guns I had been using, and I gradually reduced the weight till I used a 6¼ pound gun.

It then occurred to me that a 16 gauge gun would be a deadly arm, so I ordered one, 3 years ago, with 2 sets of barrels, one pair 28 inch, cylinder bored, for birds, and one pair 28 inch, full choke, for heavier shooting. The cylinder pair, stocked, weigh 5 pounds and 6 ounces; the full choke pair, stocked, 6 pounds and one ounce. With this pair I have killed, the past 3 winters, some 36 turkeys in the South, and many ducks. These barrels were bored for a 2⅞ inch shell, and I used 3 drams of powder to one ounce of No. 5 shot. Many times at 40 and 45 yards I have cut down wild turkeys on a cross shot, badly breaking them up; and once at 60 yards I killed a fine old gobbler, a most surprising shot. The cylinder pair are bored for a 2 9-16 shell, and with 2¾ drams of powder are deadly for grouse, woodcock, quails and snipe. This little gun, to my mind, represents the highest ideal of a sporting arm.

E. O. Damon, Northampton, Mass.

BEST MODEL FOR LYMAN SIGHTS.

In January Recreation A. S. Mosse asks for some information regarding Lyman sights on the '95 model, 30-40 Winchester. I once used one, but lately changed to a 303, same model. I find the sight more handy than the one on the old models; it does not catch in brush, as the older style did when raised. There is one objection I have found to the new model, and that is this: When carrying the rifle over the shoulder, the lever is sometimes worked loose by rubbing, thus changing the elevation of the sight. If one is careful that can be easily prevented. Besides that I can see no other cause of complaint.

In the same issue of the magazine was a question *re* shooting large game with shot guns. When in India, I used to shoot pigs in the coffee plantations. I found the best charge up to 30 yards was 9 moulded shot 3 in a layer, in a 12 bore shell, or 3 layers of 4 each in a 10 bore, with 3 drachms of powder for 12 bore, 4½ for 10 bore. After putting the shot in I used to pour over them hot candle grease. When this is discharged from the gun, it goes like a bullet for 35 or 40 yards, unless it strikes something, in which case it makes a terrible wound, like that of a 50-100 express bullet, but with less penetration.

J. F. Campbell, Peutichin, B. C.

BANKS ON THE 25-20.

I read in September Recreation an inquiry as to the accuracy of the 25-20 cartridge, compared with the W. C. F. 32, and the 22 long. I have found the 25-20 as accurate as any rifle cartridge I ever used, and its destructiveness is remarkable for its size.

I have shot jack rabbits at 100 to 175 yards with the 25-20, with the most satisfactory results. The bullet usually goes through the body at those distances. Have shot at targets 200 to 300 yards, with the 25-20 and have always found it extremely accurate.

I doubt whether the 25-20 would prove satisfactory as a squirrel or quail gun, owing to its strong penetration; but do not know of any better for rabbits. Do not think the 22 short can be beaten for a squirrel gun. I have read Recreation several years and consider it the best periodical in its line.

S. E. A., Sioux City, Ia.

TO KEEP SMALL CALIBRES CLEAN.

I have noticed several complaints from readers about being unable to clean and keep clean their 30-30's, 30-40's and other small calibre smokeless powder rifles. They will have no trouble if they will try my plan. Use a bristle brush cleaner, dipped in water and rubbed on a cake of sapolio until a little adheres. Run through barrel several times, after which rinse, brush and run through several times more. Run a few wet rags through to thoroughly remove sapolio, then a few dry ones, and the gun will be perfectly cleaned. An oiled rag run through after such a cleaning will keep the barrel in perfect condition. The sapolio will not injure the bore. When guns are put away, either before or after cleaning, they will not rust nor pit if breech block is left open, providing, of course, they are not wet inside.

George McLean, Denver, Colo.

NATURAL HISTORY.

When a bird or a wild animal is killed, that's the end of it. If photographed, it may still live and its educational and scientific value is multiplied indefinitely.

DO DOES LEAD?

I noticed Mr. Sperry's letter in August RECREATION. I have had much experience with big game during the last few years, working as collector for several museums and studying animals in their natural haunts for the purpose of perfecting myself in taxidermy. My observations may, therefore, be of some value to Mr. Sperry.

With elk it is a fact that an old cow leads the bunch. The bulls always stay in the rear. I have often seen them with their noses out and horns thrown back along their sides, trying to follow the cows through the quakers, or small pines. With deer it is about the same. I spent 2 years in Routt county, Colo., without doubt the greatest deer country in the world. I learned that does, fawns and young bucks stay together, and old bucks go in bunches by themselves. Antelope work a great deal like sheep and goats and seem to have no regular leader while feeding. When they go to water, sometimes a buck leads, sometimes a doe; but in either case it is always an old animal. As for any big game protecting its young, I have never seen it attempted. All they think of is themselves and their own safety. When they are frightened it is always the swiftest one that leads, be it doe or buck. Bert R. Beymer, Omar, Colo.

After living 21 years in the mountains of Montana and Idaho I am of opinion that neither deer nor elk have recognized leaders. The frightened dash of a bunch of either of those animals is usually led by a doe, but only because the bucks have more curiosity and linger an instant to locate the cause of the alarm. I have often watched bands coming out of the mountains. When the animal in advance stopped a moment to feed, another would take its place, and so on until all the individuals in the band had been, for a time, leaders. Horses are the only animals which have regular leaders. Even they will not always follow. In that case the leading horse gets behind the others and drives them where he wants them. I have seen does protect their fawns, but never but once saw a buck show fight for any cause. He was a whitetail and was badly wounded.

There is no game on the mountains that will fight if it has a chance to run. This region is full of bear, mountain lions and panthers but the only brute in it with grit enough to attack a man is the mosquito. Neither boards, netting, canvas nor smudge smoke will stop him; unless you break his back with a club he is bound to get you. V. Emerick, Boise, Ida.

A doe usually leads a band of elk. Twenty years ago elk were exceedingly abundant here. I was then carrying Uncle Sam's mail on horseback through the mountains and often saw several bands in a day. It was not uncommon to see an old cow leading a bunch. After running time, which begins here with the full moon in August and continues through September, the old bulls leave the band and do not return until spring. Spike bucks and occasionally forked horns remain with the bands through the winter. We have no deer save blacktails, and they do not band.
X., Hill Lake Harbor, Ore.

In reply to Lyman B. Sperry, would say I spent the summer of 1897 in Oregon, and had a good chance to study the habits of deer. I have often watched for deer at the licks and noticed that the does always led. The bucks came leisurely in the rear. When danger threatened the buck would give warning and allow the doe to escape first. These habits were first brought to my notice by William Asher, an old hunter and guide of West Fork, Ore., who has spent his life in the wilds of that country.
F. W. Weisman, Swanton, Vt.

My experience gained during a 22 years' residence in the Big Horn Basin convinces me that does always lead. Bucks are always in the rear or near the rear of the band. This applies to elk, deer and antelope. Among the half-wild range cattle either a cow or a steer leads, usually the former; a bull never.
Otto Franc, Meeteetsee, Wyo.

RECENT ARRIVALS AT THE NEW YORK ZOO PARK.

Mammals.—2 Canadian Beaver, gift of Hugh J. Chisholm; 1 Florida Deer, gift of Mrs. Arthur Duane; 1 Bonneted Macaque, from Ceylon, gift of Mrs. F. Cordes; 1 Capuchin Monkey, Bolivia, gift of Mrs. George H. Bridgman; 1 Capuchin Monkey, gift of Master Willie Samuels; 1 Pinche, gift of Miss Miriam S. Coe; 1 Fox Squirrel, gift of Mrs. G. A. Geppert; 1 Family of 7 Opossums, gift of H. C. Wells; 1 Red Fox, gift of Ferdinand Kaegebehn; 1 Squirrel Monkey and Coati Mundi, gift of F. N. Koziell; 1 Three-Toed Sloth and 1 Two-Toed Sloth, from British Guiana, in exchange; 2 Orang-Outans, from Borneo, purchased; 1

Equine Deer, in exchange, from the Philadelphia Zoological Gardens; 2 Guenon Monkeys, 2 Squirrel Marmosets, 1 Columbian Black-Tailed Deer, 6 Kangaroo Rats, 3 Minks, 2 European Brown Bears, purchased.

Birds.—2 Jungle Fowl, gift of Homer Davenport; 2 Black-winged Peacocks, gift of Homer Davenport; 2 German Nightingales, gift of Louis Fleischman; 1 Blue-fronted Parrot, gift of P. Kelly; 3 Quail or Bobwhite, gift of Mrs. Helen Mütz; 4 Yellow-crowned Night Herons, and 4 Black-crowned Night Herons, gift of C. D. Brown; Ring-necked and Peacock Pheasants, received in exchange; 2 Black and 3 Turkey Vultures, purchased; 12 Brown Pelicans, 7 Indian Peacocks, 2 Javan Peacocks, 2 Sandhill Cranes, 4 American Flamingoes, 12 Magpies and 2 Great Blue Herons, purchased.

Reptiles.—1 Cuban Boa, gift of General Daniel E. Sickles, and another of same species, gift of J. A. Ruiloba; collection of 17 rare lizards from the cañons of Northern Arizona, gift of Barnum Brown; collection of 12 Florida snakes, gift of Thomas Barbour; 2 African Rock Pythons, 2 Black-tailed Pythons, 2 Bull Snakes, 7 Texas Coachwhip Snakes, 28 Horned Toads, 6 Rainbow Snakes and 24 snakes of various species from South Carolina, purchased; 409 serpents and lizards, representing 24 species collected in Hampton County, South Carolina, by R. L. Ditmars and Charles Snyder. The following specimens have been born or hatched from eggs in the Reptile House: 33 Chicken Snakes, 47 Black Snakes, 11 Ribbon Snakes, 15 King Snakes, 29 Florida Garter Snakes, 23 Cotton Mouth Moccasins, 11 Copperhead Snakes and 6 Banded Rattlesnakes.

BREEDING PHEASANTS AND QUAILS.

Santa Cruz, Cal.

Editor Recreation:

I raised, last season, from 3 hen pheasants, about 60 young birds, all of which are doing well. I hatch the eggs under bantams. The chicks are put in a pen 2 x 4 x 7 feet, the sides and top covered with one-inch mesh wire. In one end of the pen I place a box about 2 feet wide and the width of the pen. The front of the box is closed with slats, just far enough apart to permit the chicks to run through. Build the pen where the sun can reach it as much as possible. Feed the chicks finely chopped hard boiled eggs, chick weed, lettuce and maggots. The last can be had without much trouble by placing a piece of meat where it will be fly blown and then burying it in a tub, covered with moist bran. The chicks should be fed after the first 2 weeks and have plenty of clear water. Pheasants will breed satisfactorily in confinement, if left to hatch and raise their own young.

Quails, also, can be raised in confinement, but will do better in the field if not disturbed. That, at any rate, is the case with Eastern Bob White when bred in the West. I am exchanging California valley quails for Bob Whites, which I turn out where they will be afforded good protection.

Like yourself, I am spending every dollar I can raise for the protection of game and fish. I am organizing county fish and game protection associations, and they are doing much good work. I want to see every county compelled to appoint a game warden. Persons who have no regard for the law should be made to obey it. I want to see a county license law in force, and, in addition, a State license as well. Those, coupled with the laws we now have in this State, would solve the problem of game protection. A person who can afford to go from one county to another to hunt can afford to pay to the county of which he is not a resident and in which he wishes to shoot, a small license fee. The sale of all game should be prohibited, and the bag should be limited.

I wish Recreation and the League of American Sportsmen all kinds of success, for in them is our only hope for efficient game protection. Walter R. Welch.

A FRIENDLY GROUSE.

How is this for a companion piece for your nighthawk, or whip-poor-will, episode? Yesterday morning my neighbor, Mr. C. A. Briggs, saw a large bird flutter against my porch screens and fall to the ground. Walking across the lawn, he found a full grown ruffed grouse, which he captured and kept until noon. As I was going in the country in the afternoon, I invited Mr. Briggs to join me, and we took the bird with us and released it in an ideal resort for its kind, in the native brush and timber, unfrequented by hunters, some 5 or 6 miles from this city. When released it flew gently to the ground, alighted but a few feet from the buggy and showed so little fear and such assurance that I doubted its ability to take care of itself; but it soon began to strut and move through the brush with that familiar p-r-r-t, p-r-r-t, apparently saying, "You are all right and I knew it all the time." To make sure that we were not abandoning a wounded bird to become the easy prey of its many natural enemies, Mr. Briggs alighted and put the bird up, when it quickly and satisfactorily demonstrated its ability to handle itself perfectly, although it showed no apparent haste to part company, and only flew a short distance before settling down. We could not wholly exclude the idea that the bird would remember us kindly if we were to meet again. The bird was docile until we came to natural timber, when he became interested at once and plainly indicated a desire to be released. While driving through open country or past artificial groves he remained perfectly quiet, but each patch or grove of native wood interested him keenly. The incident seems peculiar from the fact that ruffed grouse have never been numerous here, and are now practically extinct. Mr. Briggs is a sportsman, and an active member of the L. A. S., as the many applications you have received bearing his name as witness will testify; so the grouse fell in good hands.

Henry A. Morgan, Albert Lea, Minn.

PURE CHINESE.

In August Recreation I notice a review by Mr. Darlington of my article on Chinese pheasants. I hope his request that we hear from others will be granted, but should like to add a few facts to my first article in direct reply to him. Mr. Geo. Horne, of England, who has imported and raised many pheasants, says: "The original home of the pure English pheasant is the Thasis river, Trans-Caucasia. In the pure bird the whole coloring is inclined to a dark, rich red, the sides being extremely dark. English pheasants in England to-day are totally different from what they were when first introduced and hardly any 2 are alike. The Chinese pheasant, by inbreeding, is rapidly losing all traces of the original bird we had from the Thasis river."

Hon. O. N. Denny, of Portland, Oregon, lived in China and Corea 14 years. He raised Chinese pheasants there and introduced them into this country. He objects to their being called Mongolian, as it is not the correct name.

In a letter, Mrs. Denny says: "These birds are the pure ring-necked China pheasant, absolutely pure, no matter what anyone may say to the contrary." They are common all over China, Corea and Mongolia. She adds that she never heard of one being called Mongolian in the East. Mr. Davenport, of New Jersey, who has the largest collection of pheasants in the world, says there is a Mongolian pheasant, but it has never been seen in this country. It is twice as large as the Chinese.

I have been raising the Chinese birds 6 years, and they breed true to type and markings. If Mr. Darlington breeds birds of various sizes and markings, some with collar perfect, others with but little white on neck, from the same matings, it proves beyond any doubt that there is English blood in the stock. That mixture is always easier to raise than the pure blood.

H. R. Foster, Ashby, Mass.

COONS DO CALL.

I note what Mr. Wakeman says about coons making a noise. Until 3 or 4 years ago I always doubted that coons could call to one another. My wife and I were camped on one of the tributaries of the Saginaw river. I heard during the night this so-called coon or screech owl call directly across the stream from our tent. I got up to investigate and found a young coon in a trap across the river.

The animal made a noise much like the screech owl's call. The coon would rise on tip toes, hump up his back and make this sound, repeating it every 2 or 3 minutes. The call that coon gave at least 50 times while I watched him was a hoo-hoo-hoo in rapid succession and on a key near to the moaning dove's note. A man might hear this call all his life and not know it was a coon's, but I happened to be fortunate in seeing what I have related.

R. P. Alden, Saginaw, Mich.

We had 5 half-grown coons in our show window. As soon as the lights were turned out at night and everything was quiet, they would make a noise similar to that made by a screech owl or a tree frog. I can not say whether the sound was made by the male or the females. It was of sufficient volume to be heard 300 or 400 yards under favorable conditions. I have had observing hunters tell me that during mating season coons will call and answer from one wood to another at sundown, and later. I don't think anyone will question the ability of a coon to make a noise when he is nailed by a dog. These coons were captured in a rather peculiar manner. A turtle net, which had been baited with fish, was pulled out of the river and left over night on the bank. The next morning it had a mother coon and five youngsters in it.

Claude Rapp, Troy, O.

WOLF AND FOX TRAPPING.

No one can tell Mr. Carey the best way for him to trap wolves and foxes, because a method successful in one man's hands may prove an utter failure in another's. Mr. Carey must experiment for himself, always remembering that when intelligence is pitted against brute cunning the odds are with the latter.

For wolf trapping use a No. 4 trap with 8 inch spread of jaws, a 6 or 8 foot chain with a 3 pronged drag hook, and a clog of about 40 pounds weight. For foxes use a No. 2 trap with 4⅞ inch spread, a light chain and grab, and no drag. Many trappers use the common single spring rat trap for foxes.

Dip your traps in fresh blood of any kind; dip, also, a clean pair of gloves. Let all dry, and thereafter do not touch traps or bait save with the gloves. Choose your ground carefully. Dig holes for the chain and toggle and a shallow one for the trap, putting the sod and earth you remove on a blanket. Cover chain and trap with earth, and carry surplus dirt to a distance. Before covering the trap put moss or wool beneath the pan so dirt can not get under to hinder the working. Then cover with ¼ inch of earth. Smooth the dirt with a brush or a rabbit skin. Then, if you have done your work well, you will find it hard to tell just where the trap is buried. Bait for wolves with scraps of fresh meat on which rabbit hair has been sprinkled. For foxes use scraps of fried beef rolled in honey; or use mice, fish, poultry or rabbits. If you have been clever you will miss your trap the second or third morning, but you can easily follow it by the drag or grab hook trail.

If Mr. Carey has no luck with this method I shall be glad to give him others. Have often wished RECREATION would devote more space to trapping lore.

Old Trapper, Gardner, Mass.

COLLECTORS SHOULD BE RESTRAINED.

I fully appreciate the efforts you are making for the preservation of our game, fish, and song birds. Enclosed is an advertisement from *The Oologist*, an ornithological magazine, showing plainly where our song birds are going. Can nothing be done with such fellows as Howard? Have they a special license to collect birds' eggs to sell?

C. Bloom, Kalamazoo, Mich.

The ad. follows:

I am collecting this season in Southern Arizona in the Huachuca mountains. I am securing many rare and desirable sets, including red-faced, Virginia, Audubon's, black-throated gray, Lucy's, olive, Grace's, and Sonora yellow warblers; Coues', vermillion, sulphur-bellied, olivaceous and buff-breasted fly-catchers; Stephen's whip-poor-will; rivoli, broadtailed, cactus and black-chinned hummers; Arizona and long-crested jays; Scott's oriole; hepatic and Cooper's tanager; rock and canon wrens; canon towhee, painted redstart, Arizona junco, pigmy nuthatch, chestnut-backed bluebird, white-necked ravens and many other varieties too numerous to mention here. Nests with all sets not larger than jays.

O. W. Howard, Ft. Huachuca, Ariz.

ANSWER.

No doubt some of these collectors who advertise birds' eggs and skins for sale have special licenses from their respective State authorities for making such collections, but even so, privileges thus conferred are usually abused. No man should ever be allowed to collect such specimens for sale. Schools, colleges and museums that really need eggs and skins for study and for educational purposes can afford to send out their own collectors, and this commercial traffic in such specimens should be prohibited. Several States have laws prohibiting the buying, selling or having in possession for sale of any song or insectivorous bird or part thereof, and all other States should pass such laws in the near future.—EDITOR.

COLORATION OF GOLD FISH.

I have a friend who has kept gold fish several years. She has been fortunate in rearing them and they seem perfectly healthy. Among the number have been several with black markings, and an especially handsome one of a beautiful copper color with considerable black on back, sides and head; but after a few months the black disappeared and the fish became the ordinary gold color. They appear as healthy as the others. Please tell me the cause of the peculiar coloration and of its disappearance.

M. D. Blanchard,
Los Angeles, Cal.

ANSWER.

The coloration of domestic gold fish is a purely artificial one, which has been acquired through many generations of cultivation. The original color of the species was a greenish or coppery olive with tendencies toward golden and blackish. It is no uncommon thing in a brood of gold fish to find all sorts of colors from the original to the ordinary red. These colors, however, like those of other domestic animals, are more or less unstable, the tendency being to revert either to the original color or to take on blotches of black or white. These blotches later frequently turn to some other color, often red or greenish. The phenomenon is a purely natural one and does not in any way indicate a diseased condition of the fish. If it is desired to perpetuate the black or bronze colors, the individuals showing those characteristics should be used as breeders. Even if the colors disappear in the individuals selected, they are likely to reappear and remain more permanently in their descendants.—EDITOR.

REFERRED TO MY READERS.

Twelve years ago or about the time Oklahoma was opened up, hawks appeared here about the middle of September, coming from the South and going North. They remained only a day or 2. For 6 years following they were not seen. Since then they come every fall, always going North. Persons living 30 to 50 miles West of here say the birds pass over there as well. I think I can distinguish 4 varieties—red-breasted, band tail, small slate colored and black. I should like to know where they go, and why.

Elmer Dukelow, Hutchinson, Kan.

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There are thousands of men in the United States who should be life members. Why don't they join? Will some one please take a club and wake them up?

SALE OF GAME CAN BE STOPPED.

Mr. C. C. Truesdell, Rear Warden of the Syracuse, N. Y., Chapter of the League, has sent me the following letter:

Mr. Chas. Truesdell, Syracuse, N. Y.:

I regret to disagree with the League in regard to bill relating to the sale of grouse. I am opposed to such a law. So is our club, and I have already made our objections known to the members of our Legislature and our Senator. If you get the bill passed you will make a grand mistake, because it is so unjust that you can never enforce it. It would be a dead letter on the books and a dead weight on other laws that are not unjust. You ask taxpayers to pay their cash to make the laws, and pay game protectors to execute the game; yet you would prohibit the use of the game, save to a small percentage, viz: those only who shoot. Why ask the people to produce game birds at such a cost and prohibit their use?

Z. L. Parker.

This is an old man. He wants to eat all the game himself, so his children and grandchildren and their issue will not have indigestion. C. C. Truesdell.

To Mr. Parker I replied as follows:

Mr. C. C. Truesdell has sent me your letter. I beg to give you in reply some information which you may not have obtained from other sources, and which will no doubt interest you. You say it will be impossible to enforce a law prohibiting the sale of woodcock, grouse and quails. There are 24 States in the Union which already have laws on their statute books prohibiting the sale of certain species of game at all times of the year. The quail is one of the birds included in all of these laws. In some cases the prohibition also includes ruffed grouse, prairie chickens, wild turkeys, etc. Such laws are, of course, always aimed to protect the species of game which, through thoughtlessness or greed of sportsmen, or game dealers, or game hogs, have become so scarce as to require rigid and vigorous measures for their protection.

These prohibitory laws are being enforced in all the States referred to. This League alone has convicted 330 people for violations of such laws within the past year. Ohio has a law prohibiting the sale of quails at all times, and about 250 people were convicted in that State last year for violations of this provision in the law. If such laws can be enforced in other States, why not in New York?

If we succeed in getting the bill through the Legislature at Albany, you may rest assured this League will see that it is rigidly enforced throughout the State. That is what this League was made for, and it has certainly shown itself competent thus far to carry out its intentions.

We may not succeed in getting the bill through this year, but if not we will go at it again next year as soon as the Legislature assembles, and we shall keep at it until we pass the bill. We shall not stop at prohibiting the sale of quails and woodcock, but we shall have laws prohibiting the sale of all kinds of game, at all times, in all the States of the Union, within 5 years. There are thousands of people demanding the passage of such laws in States where they do not already exist, and there will be hundreds of thousands demanding them within the next few years. Game is not a legitimate article of commerce. It belongs to the people of the State in their sovereign capacity, and it is a fundamental principle of law, as old as the hills, that a man may take from the public property enough for his own use, but he may not sell any of it. The Supreme Court of the United States has said that a man who kills game and reduces it to possession acquires even then only a qualified interest in it. He may use it as food or may use the skins of game animals for clothing, or for any other domestic purposes, but he may not sell.

The Government allows the settler to go on Government land and get all the timber he needs to build his house, his barns, his fences, his bridges, and even supply his family with fuel, but let him cut one tree and sell it, and he then commits a penitentiary offence. G. O. Shields.

THE NEW HAMPSHIRE DIVISION.

Chief Warden Brooks has lately sent out a circular letter in which he says:

As we are entering on another year, this seems an opportune time to review the year just closed. Comparing the present condition of this division with that of a year ago, the result is gratifying, although not so much so as I wish. A year ago this division was organized with 25 members, and E. W. Wild was appointed Chief Warden. In May, Mr. Wild, for lack of time to devote to the work, resigned and C. M. Brooks, of Keene, was appointed to fill the vacancy. At that time there were 44 members in the State. In the next 6 months the division doubled its membership. Having passed the 50 mark we were entitled to a Secretary-Treasurer, and Sidney Conant, of Keene, was appointed to that position. Two local chapters were organized, one in Cheshire county, F. P. Beedle, Rear Warden, and one in Sullivan County, W. M. Buswell, Rear Warden. Several local game wardens were also appointed. The division has distributed the League printed matter throughout the State. It has also printed circular letters and the State fish and game laws, etc., for distribution to members and sportsmen.

A word to the members: Do not think your duty ended when you cast your vote for the division officers. What can these officers do without the support of the members? Comparatively little. You will probably say, "How can I support them?" There are several ways. First, by renewing your membership immediately on its expiration. Second, by inducing 2 or 3 of your friends to join the League. Do you realize what it would mean to our cause if every member secured 2 new members this next year? It would more than treble our influence; and every member owes it not only to his division but to the National League to get to work. Third, keep your eyes open for violations of the fish and game laws, report all cases to the League officers and assist these officers to prosecute the offenders. If every member will take it on himself to do these 3 things, the next 12 months will see the League an important factor in fish and game matters throughout the State.

To the readers of Recreation and sportsmen who are not members, let me say a few words. Join the L. A. S. at once. We are working for your interests, and in return you should give us your support by joining our ranks. Send your name to the division officers and we will gladly explain our work to you and listen to your suggestions.

To those who wish to join or renew and do not know how to do it: Send your name, your address and your dollar to the Chief Warden. We will see that your money is sent to the proper authority and your name enrolled on the books. Give us your moral and financial support and we will work for the best interests of the fish and game.

Clarence M. Brooks,
Chief Warden New Hampshire Division.

DO THE SAME IN YOUR TOWN.

Two more State divisions of the League have recently been organized. These are North Dakota and Oklahoma. This brings the total number up to 40, and we hope to organize the remaining 11 States during the coming winter. Will not the members of the League in Alabama, Alaska, Arkansas, Delaware, Georgia, Indian Territory, Louisiana, Maryland, Mississippi, North Carolina and South Carolina kindly stir themselves? The experience of sportsmen in the 40 States already organized shows what is possible. It would be just as easy to enroll 25 members in each of the States not yet organized as it was to get them in those that have completed their quota. It only remains for some earnest, energetic man in any good sized town to turn out, collect the dollars and send them in with the names. It is entirely safe to say that 25 applications for League membership can be had in any town of 2,000 inhabitants anywhere in the United States if the right man will take the work in hand and push it one day. For instance, there are 119 members in Albert Lea, Minn., 31 in Angelica, N. Y., 43 in Austin, Pa., 31 in Cresco, Iowa, 40 in Davis, W. Va., 31 in Dowagiac, Mich., 69 in Evansville, Ind., 79 in Jerome, Ariz., 26 in Kalispell, Mont., 55 in The Dalles, Oreg., 58 in Coudersport, Pa., 25 in Carbon County, Pa., 56 in Carmal, Pa., 29 in Cheshire County, N. H., 58 in Ft. Wayne, Ind., 29 in Glenns Ferry, Idaho, 36 in Hopkinsville, Ky., 50 in Bowling Green, Ky., 25 in Fontanel, Ind., 44 in Johnsonburg, Pa., 64 in Logansport, Ind., 50 in Lake County, Ind., 30 in Minturn, Colo., 28 in Mechanicsburg, Pa., 25 in New Bethlehem, Pa., 64 in New Albany, Ind., 27 in Penn Yan, N. Y., 27 in Owego, N. Y., 25 in Reynoldsville, Pa., 56 in Seattle, Wash., 34 in Terre Haute, Ind., 57 in Winona, Minn., 44 in Wichita, Kan., 27 in Victor, Mont., 30 in Ralston, Pa., 52 in Lewiston, Mont., 50 in Missoula, Mont., 44 in Carson, Nev., 43 in Lead, S. D., 31 in Providence, R. I., 29 in Steubenville, Ohio, 27 in Ludington, Mich., 29 in Oklahoma City, Okla., and 27 in Cheyenne, Wyo. Then why should there not be 25 in any other live town in the country?

AN EXCELLENT PLAN.

The protection of our game birds from the hog and the pot hunter is a question that ought to be uppermost in the minds of all League wardens and members. Plans for the coming campaign ought to begin to be worked out. Where a member or warden is alone in the field it is almost impossible to get sufficient evidence to convict. I have thought of a scheme, and offer it for consideration. I have interested some farmers and obtained their consent to post their land, and have ordered made at my own expense 100 signs forbidding hunting or trespassing. Each will be signed by the owner of the land on which it will be placed. The land owners have promised to put them up according to my directions and will inform me of all trespassing. In return I have promised that I will prosecute any and all persons caught on the grounds with a gun or in any way violating the law. We know that "fools rush in where angels fear to tread," but after one or 2 fools are caught, others will take warning. In this way we can give the birds a place to stay where they will not be molested. So far I have posted nearly 1,000 acres of the best quail ground in this section, and the first person caught on it will get the full legal dose.

Wm. S. Mead,
L. A. S. Warden Ulster Co., N. Y.

This is an excellent plan and one that has been in operation for several years past in many localities. The League also furnishes cloth posters, in any numbers desired, to any person who will agree to put them up. In these posters the League offers a reward of $10 for any person convicted of violation of the fish or game law of any State, and we pay such rewards nearly every week. Persons interested in the preservation of game and fish, no matter where, are invited to send for such number of these League posters as they can place to advantage.—Editor.

PASTE IT IN YOUR HAT.

The fourth annual meeting of the L. A. S. will be held in Indianapolis, Ind., on the second Wednesday of February, 1902. Eligible for membership therein:

All general officers of the League.

All chief wardens, vice wardens and secretary-treasurers of divisions.

All delegates chosen by the several divisions, and the chairmen of all standing committees.

Members who may determine to attend are requested to send notice to the Secretary at once, in order that a hall of suitable size may be engaged and proper arrangements made for hotel and other accommodations. We hope to have at least 30 States represented in this meeting. We especially invite all local wardens to be present. It will greatly benefit the cause to have the members from various States and from various portions of each State meet, become acquainted, exchange views and ideas, and thus fit themselves for better and more effective work at home.

LEAGUE NOTES.

While I can not give you an accurate report of the work done under our new game and fish laws, which went into force March 8 and May 11, 1901, respectively, I can tell you approximately what has been done. Over $4,000 have been received from non-resident licenses. About 135 convictions have been made and about 100 of the number have contributed $20 each to the game and fish protective fund. About 150 seines and nets and about 35 fish spears have been seized and destroyed. This is a reasonably fair showing, but by the last of the year it will be more than double this.

Hon. E. L. Littleton, Indianapolis, Ind.

I am surprised to hear that my membership in the L. A. S. has not been kept up for the past 2 years. I supposed that matter had been attended to. I presume, however, I must have overlooked it. I therefore enclose the amount of my last 2 years' dues, in addition to $25, which I understand entitles me to a life membership in the League. This will prevent the possibility of any further neglect to pay dues, and I am glad to belong to the League, as I thoroughly approve the work you are doing.

Austin Corbin, New York.

November 7th I received a letter from Mr. R. L. Brashear, of Bowling Green, Ky., enclosing a check for $53, in payment for an equal number of League memberships. The names of the applicants were enclosed with the check.

About once a week some man somewhere wakes up and decides that he will go out and get the boys to join the League. He goes at it and almost invariably gets every sportsman he approaches on the subject. Strange that the other fellows don't wake up.

George Bauman, of Marblehead Junction, Ohio, and Alec Nielsen, of Venice, Ohio, were arrested on the charge of catching undersized catfish in violation of law. The arrests were made by Game Warden David Sutton, Frank Shirley and G. H. Whitford. Mr. Sutton is a member and a local warden of the L. A. S. The accused men pleaded guilty and were fined $25 and costs each. This is another example of the good work done by the wardens of the League.

Matters are coming our way all over the State. Lately a man was fined $68.50 for having a wild duck in his possession out of season. His attorney argued that a dead duck wasn't a wild duck. The next day a man was fined $36 for having illegal nets in his possession. In the same week a man was drowned in the adjoining county while seining. Providence seems on our side.

Hon. Frank L. Littleton,
Indianapolis, Ind.

IT WILL LAST A YEAR.

A yearly subscription to Recreation furnishes one of the most delightful, instructive, entertaining presents you can possibly give a man or boy who is interested in nature, in fishing, shooting, amateur photography; or, who is fond of the woods, the fields, the mountains, the lakes or the rivers.

Many of the presents which people give their friends afford pleasure only for a few days, or weeks. A subscription to Recreation means solid comfort a whole year. It reminds your friend 12 times during the year of your kindness and generosity. There are many men and women who for 5 years past have annually sent in long lists of names of friends, accompanied with a check in order that these friends might be made happy a whole year. Would it not be well for you to adopt this plan?

Try it and see how grateful the recipient will be.

A major and surgeon of the army stationed in the Philippines writes us that recently, when the chief nurse of a small base hospital in Southern Luzon was sent away, there was a great struggle among the 5 nurses remaining for the vacant position, which meant a distinct increase in pay. Each one of the 5 came to the office of the surgeon in charge, to show cause why she should be appointed chief nurse, and why none of the others were entitled to that distinction. The young Solomon in charge was "up against it"; but gave the following decision: "Each one of you must write on a piece of paper her exact age, and send it sealed to me. The oldest woman will be made chief nurse." There is still a vacancy as chief nurse in a small base hospital in Southern Luzon.—Argonaut.

RECREATION'S FAIRY.

F. E. TARBOX.

There once was a man,
So I've heard say,
Who shot everything
That came his way.
There was also a fairy,
So light and airy,
Who lived in a bog
Just like a frog;
She changed that man,
With gun in hand,
Into a hog,
With a set of bristles
Like last year's thistles.

FORESTRY.

EDITED BY DR B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

NATURE SANCTUARIES.

J. W. LLOYD.

I should like to interest all naturalists, game preservers, natural history societies, village improvement clubs, and the like, in the work of establishing Nature Sanctuaries; that is, places where, as far as may be, all animal, vegetable and mineral nature would be left free, wild and unchanged.

Now that the League of American Sportsmen, the Audubon Societies and others are working for bird and game protection as never before; since forestry is a profession and the preservation of forests is attracting national attention; now that books on nature are multiplying and growing so popular as to be found in almost every home; and that Yellowstone Park is actually such a sanctuary, the time seems ripe for this movement.

What I have to propose is this: That every township in the United States buy and set apart a piece of land, however small, and dedicate it to Nature; a place where no wild animal shall ever be molested, tree cut, flower picked, or stone removed.

If you have at all the soul of a naturalist, think of being able to reach, within an hour's walk, a place where the wild birds and beasts are so unafraid, yet natural, that they fearlessly go on with all the usual processes of their lives as indifferently as if you were a tree, or a grazing ox. Think of a place where the tree lies where it falls; where no texts or odious advertisements are painted on the rocks, no initials carved on the trees, no flowers pulled, roots and all, no "improvements" made! What a place for the lover of wild nature, of study for the student, of rest for the weary! Think what such an untouched spot would look like at the end of a century!

In almost every township in the United States there is some bit of wild waste land, practically valueless for agriculture, that could be bought for a small sum and turned into a sanctuary. The more barren, hilly, rocky, rugged or swampy, the better. Often the more utterly valueless such a place is, agriculturally or commercially, the more picturesque it is to the artistic eye, the more fitting in every way for the uses of a nature park. It would be an advantage, however, if in the spot chosen there should be a great variety of surface, soil and condition, swamp and hill, stream and pond, wet and dry, clay and sand, slope and level, evergreen and deciduous forest.

In most of the forest States little would be necessary except to enclose such an area and leave it to nature. In the prairie States it would, no doubt, sometimes be necessary practically to create the sanctuary by planting trees and introducing the animals. The need of a place of the kind is tenfold greater in the prairie than in the forest lands, for many children in the open regions have never even seen a wild grove. To cultivate the soil thoroughly at first, and make one thick, broadcast sowing of mixed tree seeds and nuts, would probably be all the work ever necessary, even there, except fencing and buying a few animals.

How vastly superior such a place would be to a formal park, with fancy pagodas, concrete walks, arranged shrubbery and signs of "Keep off the grass"! How superior to a menagerie of prisoned brutes, or a museum of stuffed victims, to an actual student of nature! "Wild Animals I Have Known" might then be the boast of every schoolboy.

The sanctuary should belong to the community, although, of course, there is nothing to prevent rich men from having private ones on their own estates. The land could either be presented to the township by benevolent citizens, or bought by the community, collectively, and held as public property. The more everybody is interested in its possession and maintenance, the more its ends are likely to be subserved.

While the ideal of such a place is that of absolute wildness and undisturbed nature, there would probably not be many places where such an ideal could be quite consistently carried out. Probably in all places animals actually dangerous to human life would have to be excluded. Rattlesnakes and copperheads would certainly be condemned, though it is to be hoped that all other snakes would be spared. Weasels would probably have to be checked or extirpated, not only because so wantonly murderous to poultry, but because they might be equally so to birds, rabbits, squirrels, etc., thus defeating the very ends of the sanctuary; and unlimited otters might soon exterminate the fish in a small lake. Obviously, in a small preserve, the balance of life could not be preserved as in a great wilderness. Army worms, gypsy moths, and their ilk, could not be given benefit of sanctuary, and most farmers would require that coyotes, foxes and such "varmints" be refused. Along this line a sort of compromise would be necessary, and perhaps the only way to effectively meet the difficulty would be to place each sanctuary in charge of a forester, or keeper. This forester should not be a rough, coarse specimen, a police guardian merely, but a man of gentle character, fond of animals and wild life, sympathetic to the artistic possibilities of the primitive and sufficiently educated by observation and study to name and explain to visitors the various animals, flowers, rocks and trees they might be curious about. He should be firm and vigilant, but a gentleman. Necessarily he should be a good shot and a skilled trapper, able to remove undesired animals without frightening the others. Such a keeper would be an absolute necessity to prevent poaching, intrusion of dogs, cats, stone throwing boys, flower thieves, bark thieves, rock painters and the like vandals. He could be domiciled in a little house of logs or stones in the middle of his domain, a house made as much like its wild surroundings as possible.

The position of forester would be an ideal one for a naturalist, especially if his tastes were literary or his health delicate. To this man's judgment could be safely left the task of keeping a wise balance of life in his little world, preventing any one species from extirpating another or becoming a nuisance to the public. He might properly be required to keep a journal of observations on the weather, the habits of animals, etc., which would be valuable as a book of reference. His value as an experienced teacher to visitors and students should be great, too.

The sanctuary should be open to all well behaved visitors, at all hours; but these should not be allowed to take into the park dogs, firearms, axes, traps, or other instruments likely to violate the sanctuary. They should not be allowed to deface or injure, or make frightening noises, remove anything, or to leave lunch baskets, boxes, paper, bottles, or such rubbish. Perhaps the best way to secure these ends would be to require each would-be visitor to get permission from the forester, giving promise to respect in all things the objects of the sanctuary. To save repetition, the forester could have them sign name and address in a book, under a printed pledge, and then give each a badge to be worn conspicuously whenever in the sanctuary; permission and badge to be recalled from anyone guilty of violation.

In one important respect the letter of the sanctuary might be broken in the interest of its spirit. Those who have observed nature, or read Wilson Flagg, know that all small birds and quadrupeds prefer a jungle, or tangled thicket, such as country roadsides show, to a great forest to breed in. Yet, if left to itself, the sanctuary would in the course of half a century have only majestic trees, with little underbrush or cover for the shy and timid nesters. To obviate this, I would advise that a strip of perhaps 2 rods' width, about the borders of the sanctuary, be made into and kept a thicket. This could be easily done by partly severing the trunks of the larger trees every 5 years or so, and bending down and pleaching the tops. The admission of light would cause an immediate junglelike growth of weeds, briars, sprouts and vines, mingling with the plashed tops, till nearly or quite impassable to man and the larger animals. This would quickly become the chosen and true home of most of the smaller creatures in the sanctuary, especially the birds. In the breeding season it would swarm with life and ring with music. Possibly, for the shyer birds, one or more such jungles might be profitably made in the interior. Most of the minor plants and wild flowers would thrive better in these thickets, too, than under the great trees; and where only a small sanctuary could be afforded it might be better to make the greater part of it of this character.

This surrounding jungle hedge would serve several other ends, also. It would attract birds, rabbits, etc., from the outside world, repel pursuing dogs, help to keep out horses, cows and such grazing beasts, and keep out the vision of the outer civilization from the nature-seeker wandering within. In stony countries the farmers living about the sanctuary would esteem it a privilege to be allowed to throw the stones from the clearing of their lands into this hedge, and might be encouraged to do so, as these stone heaps would be ideal castles of refuge for woodchucks, rabbits, chipmunks, red squirrels, mice, snakes, and such small fry.

Birds and small mammals might be encouraged, if necessary, by judicious doles of grain, nuts and seeds; especially if the natural supply were lacking, in times of terrible cold or after severe winter storms.

It would be well, too, to surround the sanctuary with a close wire fence to exclude dogs and grazing animals.

Animals once resident in the neighborhood, but now extinct, or practically so, might be reintroduced, as raccoons, woodchucks, wild turkeys; and a few deer would be a beautiful feature. The many advantages of such a sanctuary are so self-evident they hardly need pointing out. Nevertheless, I will mention 2 or 3.

As a means of discouraging the wanton cruelty of children and developing a sympathetic love for the lower animals and interest in their life and habits, it could not be excelled.

To an animal artist or photographer, it would be paradise.

As a place of refuge and refreshment for brains overwrought and souls saddened by the conflict, artificiality and shams of modern life, it would be worth inestimably more than its cost. There is no sanitarium like pure nature.

HOW TREES GROW.

I enclose clipping from a recent issue of the *New York Journal,* and appeal to all the brethren of the woods to say if this be true.

> In Washington, Me., is a tract of 1,000 acres from which the spruce and pine timber has all been cut in the past 35 years. The tract was formerly owned by the father of the late Judge Richard D. Rice, of Augusta. At the time of the death of the elder Rice no timber had been cut from the land except what had been stolen by timber thieves, who then infested the State.
>
> So extensive had this thievery become at one time that Rice determined to put a stop to it, and to that end he employed a blacksmith to make a great number of iron spikes. He had 2 of these spikes inserted, one on either side, in each of the most valuable trees on the tract, and on each spike were stamped his initials, "W. R."
>
> After that the mill men, who generally knew where their logs came from, would not take any that they suspected of being from the Rice lands for fear the teeth of their saws would be knocked off against the "W. R." spikes. Not being able to sell the logs, the thieves quit stealing from Rice's land.
>
> Some years later, when the land was cleared of timber by its new owners, the story of the spikes was recalled. It was concluded that Rice's blacksmith could not reach higher than 7 feet from the ground and so the operators sawed off the trees at that height, expecting to steer clear of the spikes. But they forgot to allow for the growth of the trees and many a saw was ruined by the "W. R." spikes, which were found 25 to 30 feet up in the trunks.

This assumes that trees grow from below, like the Irishman's house which was built by putting one brick under another till the building was completed.

Trees increase their height by new growths from the extremities of the branches, new twigs each season. A spike driven into a tree 7 feet from the ground in 1901 will be 7 feet from the ground in 2001, if the tree should live so long. Am I not right?

W. H. Nelson, Washington, D. C.

You have correctly stated the facts. Trees grow in length at their extremities; hence a spike driven in a tree at any height remains at that height.—EDITOR.

DESTRUCTION OF WESTERN FORESTS.

Much of the pleasure of my trip to 'Frisco was spoiled by smoke from forest fires. All along the Northern and Southern Pacific railroads there was hardly a moment that one could not look out of the car window and see one or 2 forest fires raging in the hills. Thousands of acres of timber have been destroyed. It was so smoky I was unable to see Mount Tacoma at any time, going to or returning from Tacoma. The train conductor told me he had not seen Rainier for a month, on account of the smoke.

Mount Hood, the beautiful snow peak, and the pride of Portland, was also invisible, as was St. Helens, although the railroad passes within 10 miles of the latter.

Surely something could be done to prevent these terrible fires. They destroy in a few weeks what it takes centuries to produce. Many of the fires, no doubt, are caused by the carelessness of camping parties, prospectors and others; but I believe most of them are caused by sparks from the locomotives, in the dry season. If the Legislatures of these Western States would enact laws inflicting severe penalties on persons causing forest fires, and requiring the railroad companies to clear up all dead and down timber within 200 feet of their tracks, the danger of fires would be greatly reduced, and the forests, what are left of them, saved. A. S. A. Himmelwright,

Darby, Mont.

STATE SHOULD CONTROL ITS FORESTS.

Dr. Judson F. Clark, the newly appointed Assistant Professor of Forestry at Cornell University, who is traveling in Germany to study forestry methods, writes interestingly from the Black Forest: "The forest area under State control is being rapidly enlarged by purchase of old meadows and of private forest property. Most of these newly acquired areas present phases of the interesting and very varied problem of transforming a 'selection' forest into something better. These small private forests, managed under the so-called selection system, are usually *not managed at all,* and by the time the owners are ready to sell to the State the condition of the property is often *little better that a cut-over Adirondack woods."*

Just as with us; the State gets the property when it has lost its value to the private pocket, when it is already mismanaged and time must elapse for it to become productive again. This observation also gives proof of our contention, that forestry, real forestry, is not profitable to the small owner; it takes large capital, long-continued existence; otherwise the attempt at forest management is soon abandoned.

PURE AND IMPURE FOOD.

"What a Man Eats He Is."

Edited by C. F. Langworthy, Ph. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

SCHWEITZER BREAD.

A combined system of milling and bread-making has been recently introduced in Paris, the object being to convert 100 pounds of wheat into 100 pounds of bread at a low cost and at the same time furnish bread of a superior quality. It is stated that official analyses by the National Agronomical Institute and by the municipal laboratory of Paris demonstrate that the Schweitzer bread contains more nutritive material than ordinary bakers' bread. The bread, known as family bread, *pain de menage,* is sold to the working classes for about a cent a pound less than ordinary bread.

Just as coffee is better if freshly roasted and ground, so, it is claimed, bread is better if made from freshly ground wheat. The flour in this mill, which is a part of the establishment, is ground only in quantities sufficient to meet the daily needs of the bakery.

According to Consul W. P. Atwell, "The wheat arrives in a boat, which is moored in the canal on whose bank the bakery in Paris stands; elevators hoist it into bins, whence it is carried by an immense elevator to the top of the mill and turned into the different cleaning and separating machines. After all foreign substances have been removed and the grains of wheat have undergone a thorough brushing and washing, they are clean and shiny. To prevent the possibility of dust remaining in grooves of the wheat kernels, the grain is run through a Schweitzer appliance, which, seizing each grain lengthwise, splits it exactly in the groove.

"The wheat thus cleansed passes into the mill, composed of flat, circular steel grinders, grooved in such a manner that they accomplish the decoration of the kernel and its granulation into meal at the same time. These grinders are movable, but do not touch, so that, instead of crushing the wheat and producing a very fine flour, a considerable portion of the outer and harder part of the wheat, containing gluten and other nutritive properties, is retained in the flour. The bran alone is expelled.

"Attached to the mill are the works for kneading the meal, water, and yeast into bread. All of this is done mechanically, the works being separated into 3 stories. Special yeast is prepared in the upper story in rooms heated in winter and cooled in summer. The yeast, flour, and the salted and filtered water are carried down by machinery into kneaders having the form of half cylindrical tubs, rotating on 2 pivots placed in the axis of the kneading troughs, so the tubs may be placed at a lower or higher angle in order to accelerate or retard the kneading.

"One person can attend to 2 Schweitzer kneaders, regulating the distribution of the dough, and thus the kneading of 2,000 kilograms (4,409 pounds) of dough an hour is accomplished. The steel arms of the mixing and kneading machinery, some of which are stationary and others mobile, stretch and work the dough much better than hand power.

"The wheat, salted water, and yeast automatically enter one end of the tub, and dough in an endless skein of pale yellow issues from the opposite end. This dough finally falls on tables on the ground floor, where it is weighed and made into loaves of every shape and size. Small wagons are charged with the shapes, which then go to the raising room. Each floor has a fermenting room kept at an even temperature.

"The dough after rising is carried by wagons into the baking room, where it is placed in Schweitzer ovens heated by gas from retorts arranged in such a manner that the gas does not enter the oven, and the heat is so regulated that the baking operation goes on automatically.

"In connection with this model establishment is a laboratory for the chemical examination of the samples of wheat submitted for purchase. Mr. Schweitzer has mills, ovens, and kneaders of various dimensions that may be worked by machinery or hand power. The latter system enables the farmer to grind his own wheat and make his bread from an unadulterated and wholesome product. It is regarded as particularly adapted to the colonies."

JAM BRICKS.

According to the London *Daily Telegraph;* "Commercial journals in the United States are just now directing much attention to the vast development that is taking place in California and elsewhere in the manipulation of fruit pulps and jam, and it seems that something like a revolution in the enormous industry is by no means an impossibility in the near future. Something of the kind has been foreshadowed in this country, and observant visitors to the great exhibitions of groceries and confectionery at the Agricultural Hall last autumn did not fail to note the prominence assigned to partially boiled-down fruits with a view to their ultimate conversion into preserves, seeing in the idea a possible valuable resource to the British market gardener, now so often handicapped by glutted markets and low prices. The aim, however, of the American experts is to go yet farther and to work their pulps with the due proportions of sugar into practically jam bricks. One need not be very old to remember how housekeepers of the recent past used to pride themselves on the stiffness and firmness of their damson or cherry "cheeses," which could be stamped out in fanciful forms with a pastry cutter and were not even sticky to the touch. Those were due to careful boiling to exactly the right point, after processes of putting the fruit through fine sieves and bringing the sugar to candy. This, on a wholesale scale, is what American jam makers want to accomplish, and many experiments in that direction are now being carried out.

Indeed, so far has it gone that a firm of wholesale dealers in American produce submitted to the British War Office a number of specimens of these jam bricks for the use of the troops in South Africa. pointing out the valuable saving that would be effected in freight and transport could oiled tissue paper take the place of the present tins, glass jars or crockery pots. The samples received the fullest consideration, as the condensed soups supplied through the same house had won special commendation from Earl Roberts. The preserves were not adopted, however, which, it may be said, did not cause any surprise to those concerned, who are themselves the first to admit that there are still obstacles to be overcome before a perfect solidified preserve is available. That these will be surmounted within the next few months no one has the slightest doubt, and meantime the samples in this country are attracting much interest throughout the grocery trade. The problems have been overcome with respect to mincemeat, long regarded as impossible of compression; and the traveler, the soldier, the sportsman, or any other to whom small bulk is a consideration, can now purchase a hard, heavy cube of about 2 or 3 inches in size, from which a few fragments chipped off and moistened with sherry, brandy and water or milk, will prove an excellent presentment of the favorite Christmas delicacy.

Incidental to these inquiries, many interesting facts were to be gleaned as to the growing part that fruit pulps from abroad are playing in the manufacture of English jams. When a single order from one noted firm alone amounts to 28 tons of apricot pulp from California, it will convey some idea of the magnitude the system is attaining. Plums, pineapples, quinces, apples, and peaches are also largely utilized in this way, and the latest triumph, as it is claimed, in this direction is that of being able to send to this country strawberry pulp. Small wonder, indeed, that the British grower has cause for complaint that the demand for his products is not what it was. With the treatment of this material on such a scale, it is not astonishing that those who know the wonderful climatic advantages of California for drying should advocate the carrying of pulp preparation a step farther and presenting the jam itself without the costly encumbrances of old fashioned packing.

GRAPE JUICE AND SWEET CIDER.

Fermentation is due to the presence of micro-organisms which, like mold spores, abound in the air. They gain access to the juice or cider after it is pressed, or they may have adhered to the fruit and have been washed off in the juice. These ferments are minute plants and grow in grape juice or cider in the same way that yeast plants grow in bread dough. Their growth may be prevented by sterilizing the juice as well as the vessels used in connection with the bottling of the product. Heating is the simplest, safest and most effective means of sterilizing; but great care is necessary in order to so control the temperature as to secure thorough sterilization without injuring the flavor of the product. A report of the Canada Experimental Farms gives an account of a series of experiments on the best means of sterilizing grape juice. The conclusion, which probably applies to sweet cider as well as to grape juice, was that "the natural flavor of grape juice may be preserved intact by raising the temperature of the juice gradually to 170 degrees F., keeping it at that point 10 minutes and then quickly bottling it, taking care to use absolutely air-tight and thoroughly sterilized vessels. These vessels should be taken from a tank or kettle of boiling water, immediately filled, and corked or covered with the least possible delay."

The use of antiseptics, such as salicylic acid, is considered unwise. They are unnecessary, and unless used with great caution may be injurious to health. Furthermore, the manufacturers, seldom, if ever, state that antiseptics have been used and the purchaser is deceived. Grape juice is frequently given to invalids. In such cases it is especially important not to administer drugs which may be dangerous.

BOOK NOTICES.

EXPLORING OLD GROUND.

> In the spring of 1899 an expedition of 126 people sailed from Seattle, Wash., on a voyage of discovery along the coast and inland waters of Alaska. This expedition, the result of a plan on the part of Mr. E. H. Harriman, of New York, to take his family on a summer cruise in those waters, included, in addition to Mr. Harriman's immediate family, 25 men of science, representing various branches of research, including well-known professors in universities on both sides of the continent and leaders in several branches of government scientific work; 3 artists; 2 physicians; 2 taxidermists; 2 photographers; a chaplain, stenographers, and a full crew.

The above is an extract from a circular issued by Doubleday, Page & Co., of this city. The book mentioned therein has been in preparation ever since the return of this great "expedition of discovery," and is now offered to a patiently waiting and expectant public.

The idea of calling such an outfit an exploring expedition, a discovering expedition, or a scientific expedition is amusing to anyone who has really explored or discovered any of the wild country of the North. Here was a party of 126 people, snugly quartered on an ocean steamer and provided with all the luxuries possible to carry on such a craft. The steamer cruised among the islands and through the sounds and bays of Alaska "discovering" certain glaciers, bays, valleys and mountains that had been familiar to hundreds of fur traders, trappers, revenue officers and real explorers for 50 years past. Small parties went ashore from the steamer here and there and made short trips up the mountain sides or over the islands, accompanied by the official photographers, and had themselves photographed in various poses, with backgrounds of glaciers, or mountain peaks, or island forests, and the public is now given a chance to see just how these "scientific explorers and discoverers" look, when they stand up against these natural formations. The price of these pictures of these great explorers, and such text as the authors have seen fit to prepare, is $15 a copy. Three sample photographs are sent out with the circular announcing this book. These so-called discoverers, Professors Colville, Brewer, John Burroughs, John Muir, Mr. Emerson, and Dr. Gilbert are standing in what they evidently consider their most captivating poses and the pictures seem to say to the observer, "this style, $15." It would be interesting to know just how many people will pay $15 for copies of this book. Of course, Mr. Harriman will present each of his 126 guests with a copy, and these people will value it as a souvenir of a great junket; but it would be strange if any large number of other people should put up their good money to see pictures of these people, and pictures of glaciers and islands that have been illustrated hundreds of times in magazines and books, and to read of rivers and mountains and glaciers that everybody has read of hundreds of times and several of which this great "exploring" party rechristened in honor of themselves or their friends. We shall see what we shall see.

The shameless copying of borrowed ideas is one of the most amazing phases of book producing to-day. It can not be called literature. It is a mad rush to put between covers whatever can be made, on any pretext, to sell. Woe the day when Elizabeth wrote of her German garden! Follows a host of unimportant women who rush into print with volumes of what Emory Pottle calls "garden truck." They think they see a chance to prate, before the public, of themselves, their husbands, their servants, and their children. "The Garden of a Commuter's Wife" is one of these efforts. It purports to be by the gardener and is published by The Macmillan Company, New York.

It seems a pity that a writer who can produce such charming literature as "A Journey to Nature" should give his time to putting forth such a machine-made book as "The Making of a Country Home." However, Mr. Mowbray is a newspaper man and accustomed to writing whatever will turn a penny. "The Making of a Country Home" is not to be considered as literature, but it may be an honest attempt to give information. It is published by Doubleday, Page & Co., New York, and will be sent on approval if desired; price, $1.50.

"A Year in a Yawl," by Russell Doubleday, is the third tale of an adventure series, especially interesting to boys. The trip described in this latest book was made by 4 boys, in a boat of their own construction, over 7,000 miles of water.

On request this book will be sent, postpaid, on approval, to be paid for if wanted or returned if not. Published by Doubleday, Page & Co., New York; price, $1.50.

If you wish to make several of your friends happy give each of them a year's subscription to Recreation. At least once every month they will think kindly of you.

SUBSCRIPTION RECEIPTS FOR 3 YEARS AND 11 MONTHS.

Read the deadly parallel columns:

	1895.	1896.	1900.	1901.
January ...	$379	$723	$3,205	$3,903
February ..	256	693	2,151	3,267
March	300	1,049	1,919	3.710
April	342	645	1,570	2,760
May	292	902	1,377	2,303
June	307	770	971	2,016
July	345	563	854	2,000
August	306	601	1,262	2,245
September .	498	951	1,464	1,940
October ...	438	969	1,842	2,227
November .	556	1,054	2,060	2,570
December .	652	1,853	4,742	
	$4,671	10,773	23,741	

November shows a gain of $510 over same month last year. More hot stuff for the man who is trying so hard to kill RECREATION.

SAVE THE GREY SQUIRRELS.

The grey squirrel is threatened with extermination, and will soon disappear unless vigorous measures are adopted to save him. Shall this be done? Or shall we allow this bright little denizen of the woods to follow the buffalo and the wild pigeon?

The grey squirrel is one of the most interesting and beautiful of our smaller mammals. His grace and skill as a climber; his frequent and daring leaps through space, from tree to tree; his saucy, merry chatter; his industry and forethought in providing food for winter are such as to command the admiration and respect of every man, woman and child who studies him. He is easily tamed and in many city parks are dozens of grey squirrels that habitually eat from the hands of visitors. Who could have the heart to kill one of these beautiful and confiding animals after having seen it eat from the hand of a child in Central Park? I would as soon think of killing the child as the squirrel; and one would be just as much like sport as the other.

The squirrel does not like solitude. He shuns the deep forest and follows civilization. He haunts the small patches of woods among the farms. Thus he is easy game for those who see fit to hunt him. The forests are every year being denuded. The patches among the farms are becoming smaller and smaller every year. Thus is our sprightly little neighbor becoming an easier mark from year to year. Every farmer, every farmer's boy, every city sportsman, is after him; and he is doomed to total annihilation if the pursuit goes on.

Should we not be ashamed of ourselves? Would it not be another crime on our hands to wipe out this lovable and confiding little creature? Have we not, as sportsmen, enough to answer for already?

Then let us call a halt. Let us spare the grey squirrel. Aye, let us save him. Let us henceforth declare him not a game animal, but the special friend, the forest comrade, the protége of American sportsmen. Let us all refuse to shoot him or allow him to be shot, where we can possibly prevent it. Let us secure the enactment of State laws prohibiting the killing of grey squirrels at any time.

What say you, my brother sportsmen? Let me hear from you.

ANOTHER CORMIER GAME.

N. E. Cormier, Chief Game Inspector of the Province of Quebec, who made himself notorious 2 years ago by some questionable transactions with Dr. W. A. Wakeley and some friends from this city, is in trouble again. This time he made a grand stand play and got himself talked about in the newspapers by threatening to punish Judge Gaynor, of Brooklyn, for hunting in Quebec without a license. While sitting around waiting for Judge Gaynor and party, Mr. Cormier encountered Mr. S. Scudder, of New York, a friend of the Judge. Mr. Scudder expressed a desire to settle the charge against his friend, and it is said Mr. Cormier exacted a license fee of $25; another $25 for so-called fees "correctionelle," and another $25 for Mr. Cormier's unspecified expenses. It is reported that Mr. Cormier also required Mr. Scudder to pay $150 for license fees for 3 servants whom Judge Gaynor and party had taken with them into the woods. When the Judge returned to civilization and learned what had been done, he produced a license which he had taken out at Ottawa, on his way into the woods, and for which he had paid $25. The Judge has filed a written complaint against Mr. Cormier, with Premier Parent, at Ottawa, and if this transaction does not result in Mr. Cormier's summary dismissal from the Government service, many sportsmen who have been up against Mr. Cormier's queer games would like to know why.

Six city sportsmen were shooting quails on a farm near New Castle, Pa. They were armed with high priced guns and were guided in their search for birds by several high bred dogs. Presently a farmer's boy named Reed McBride joined the party, more as a sightseer and student than as a shooter. He was armed with a single-barrel shot gun and chaperoned by a pug dog. He was in the act of climbing a 10-rail fence when a quail got up in front of one of the good dogs. The shooter whose turn it was fired first his right and then his left barrel at it. The bird went on. The boy, who was astride the top rail at the time, took a shot at the bird and dropped it, and the pug retrieved it in good shape. The dog, who seemed to be well versed in the matter of courtesy, delivered the bird to the city sportsman who had tried so hard to kill it. The boy patted the dog on the back and said O. K. The city chap in turn passed the bird over to the farmer's boy and said to his friend that this was the first pug he had ever seen trained to retrieve birds.

Game and Fish Commissioner Harris, of Colorado, has made another big haul of law breakers. This time the victims are Indians. Mr. Harris went to Meeker in October last and organized a posse of 8 men, including Sheriff Amick, Deputy Sheriff Aichers and 5 cowboys. All the men armed themselves with Winchester rifles and 6-shooters, mounted themselves on good horses and raided a camp of Ute Indians who were slaughtering deer on White river. They captured 4 bucks, a contingent of squaws and pappooses and 200 deer hides. The Indians were turned over to Sheriff Amick, were lodged in the County jail, and will be dealt with according to law. Mr. Harris is doing splendid work, and if the sportsmen and other taxpayers of the State will stand by him he will certainly break up the vast army of game hogs, white and red, that have for so many years been slaughtering the game of that State.

John R. Goodall, a commission merchant in San Francisco, Cal., was arrested over a year ago for having quails in his possession during close season. He was convicted and sentenced to pay a fine of $20. He appealed to the Superior Court, and in the trial there the judgment of the lower court was affirmed. In August last, Mr. Goodall filed a petition for a rehearing. This petition came up in court Oct. 12 and the motion was denied. This was the last resort for Goodall, so he walked up to the captain's office and settled. It is safe to estimate that his lawyer's fees and other expenses in this case have aggregated at least $500, so Mr. Goodall will probably deem it wise to keep on the safe side of the law in future.

The American Copper Extraction Co., of Rahway, N. J., was recently fined $100 for discharging poisonous chemical matter in the Rahway river. The company fought the case openly, and the fact that the court sustained the complaint of the State Fish Commission and punished the offenders established an important precedent in the interest of fish protection in New Jersey.

Major John Dunlop, Dr. Brinkman, and Dr. St. John, of Hackensack, N. J., went to New Brunswick last fall and had an interesting hunting trip. Major Dunlop carried off the honors of the trip by killing a moose and a caribou. The heads were shipped to a taxidermist in Bangor, Me., to be mounted and will later be on exhibition at the major's home.

I am informed that a moose head exhibited by the Ontario Government at the Pan-American Exhibition has a spread of 67 inches. Can any reader of RECREATION verify this statement? The moose is said to have been killed at Powassan, Ont.

Traveling man to Kansas farmer.

"Where do you get water?"

"Up the road about 7 miles."

"You haul water 7 miles for your family and stock?"

"Yep."

"Why in the name of sense don't you dig a well?"

"Because it's jest as far one way as the other, stranger."—Exchange.

When Tillie used to cross my path,
  Afoot, or riding on a wheel,
Her passing-by an aftermath,
  A breath of violets, would reveal.

But in her auto, she, to-night,
  So fast that it could not be seen,
Rushed by me; and though failed my sight,
  I knew she passed—by gasoline.

I have taken RECREATION several years and always read the advertisements as eagerly as the stories. When I get through with it I lend it to at least a dozen of my friends, all of whom say it is one of the best of sportsmen's journals.

J. E. Kirkbride, Boulder, Colo.

She: You don't know what it is to love.

"I don't, eh? Haven't I been to every play, read every popular novel in the last six months, got into debt hopelessly, had my appendix removed, and all for your sake?"—Exchange.

A LADY'S VERDICT.

She whose guardian angel guides her wandering feet to the Rock Island Railway may well bless that celestial caretaker that he has so wisely chosen. The exigencies of climate in Washington, D. C., that city of frequent weather changes, put it into the wise head of my physician, some months ago, to order me to fly to the mountains of Colorado for the sunshine and healing denied by the Capital City. A kind and thoughtful friend, who had taken an interest in my welfare, procured my ticket via the Rock Island route from Chicago to Denver. I was fortunate in having the gentlemanly assistance of a friend from Cincinnati to Chicago, and was placed by him in the Rock Island depot, whence a train, due to start at 10 p. m., was to transfer me and all my worldly wealth—the latter packed in a trunk—to the Queen City of the Plains. My experience with the road began with the agent in the depot at Chicago. The little details concerning transportation, which are so puzzling to inexperienced lady travelers, he attended to for me with an air of being favored rather than of conferring a benefit. When the train was announced for departure I was assisted to my place and made as comfortable as if I had been the officer's sister. Let it be his guerdon that a lonely girl, a stranger in that great city, is deeply sensible of his gentle goodness, and profoundly grateful for it. The cars are marvels of splendor and miracles of comfort. What a wonder the American railroader is, as a purveyor of luxuries! As much at ease as if at home I made the long journey from Chicago to Denver. The trainmen were considerate and watchful, the conductor a prince and the porter a guardian.

The management has provided a roadbed over which their trains roll without jar. One glides, instead of jerking and jolting. Talking is not an effort and dozing is natural. But the dining car! What can I say that will give the prospective tourist an idea of the delights which wait on appetite there? Not only is the *menu* extensive and elaborate, but the cooking is perfect. Everything that comes before the traveler is prepared with the highest art, and it is placed on the table in the most alluring fashion. There, if nowhere else, the invalid can eat. It looks good; it smells good; it tastes good. There you call for what you want, and pay for what you get. It is dinner *a la carte,* served piping hot, tempting and satisfying. All you have to do is to eat. The cook and the waiters have done the rest.

Dear girl in the sizzling, drizzling, freezing East, do you contemplate a visit to the mountains, with their sunshine and their balm? Come to Colorado, over the Rock Island road. Come to Boulder and learn what it can be to live where Nature—not the politicians—furnishes the wind.

Edna C. Nelson,
Boulder, Colo.

QUAIL SHOOTING IN NORTH CAROLINA

An experienced sportsman and regular visitor to the North Carolina shooting grounds has the following to say of the quail prospects this season:

Reports from the different sections of North Carolina credit quails as being more plentiful this winter than they were last. A reasonably diligent hunter with fairly good dogs can easily find one to 2 dozen bevies a day. Topographically there are 2 hunting sections in the State, the Piedmont or that part of it comprised in the foot hills and rolling lands, and that East of it, which is leveller to the coast. As far as birds go, there is little choice. In the foot hills there are fewer briars and sand burrs, rather more open cover shooting, and more exercise. The level section is easier to get over, and so location is a matter of choice. In the river sections of the Piedmont, the better hunting will be off the river bottoms, owing to the numerous and high freshets last summer, which washed the bottoms out, destroyed the corn and wheat and drove the birds back; but as these bottom lands are narrow, it will make no material difference to the sportsmen in regard to their location. The open season of North Carolina begins November 1. Many sportsmen prefer December for their annual quail shooting because then the climate is more bracing for field work.

The Southern Railway has issued its "Hunting and Fishing" for 1901-1902, which gives localities and stopping places, and it would be well for sportsmen not informed to open correspondence with some of the persons named. The book is without bias, and aims but to help the hunting fraternity.

The Polk Miller Drug Co., of Richmond, Va., is using RECREATION to call attention to the merits of "Sergeant's Dog Remedies," a line of preparations Mr. Miller has sold with signal success for the past 15 years. Possibly more dogs have been cured by the timely use of these well-known preparations than with any other similar line existing. Polk Miller, who originated them, and who is an author of considerable note, is president of this company, and for 40 years has had practical experience in treating the various diseases peculiar to dogs. A revised edition of his book on "Dogs—Their Ailments—How to Treat Them," including a pedigree blank, can be procured by sending the company 3 cents in stamps. This book, because it gives an accurate description of the more frequent diseases with which dogs are afflicted, will be found invaluable to every dog man and kennel owner.

The Pneumatic Mattress & Cushion Co., whose advertisement appears elsewhere in this issue, a concern with which every sportsman should be acquainted, intend to introduce themselves more widely to the sportsmen of the country during the coming year. To this end they have contracted for advertising space in all the leading sporting publications and have had an exhibit at the Philadelphia Sportsmen's Show. They will undoubtedly be represented at the Chicago show, and have already contracted for large space in the New York show. If sportsmen remain ignorant of the ease and comfort secured by the use of the Pneumatic mattress while camping or at home it will be their loss.

Geo. H. Daniels, G. P. A. of the New York Central Railway, is issuing a monthly bulletin called "The Four Track News," every number of which contains a large quantity of reading matter of deep interest to every person in search of general information. A good deal of this material is selected from the best newspapers and magazines in the country, and covers a wide range of subjects. Other portions of it relate to the operation of the New York Central System, and to the country, the towns, cities, mountains, lakes, etc., which it reaches. It is well worth the while of any person who wishes to be well informed on all the topics of the day to subscribe for "The Four Track News."

The Massachusetts Audubon Society has arranged with the Taber Prang Art Company to publish a bird calendar for 1902. I have received a copy of this calendar, and it is truly a beautiful production. It consists of 6 large plates of exquisite drawings of birds, and a calendar for 2 months is printed on each of these plates. The bird pictures are reproduced in colors, with all the spirit and fidelity of the original watercolor paintings. A description of each bird appears on the back of each plate. The calendar sells at 50 cents, and every bird lover should have a copy of it. Address Harriet E. Richards, Secretary, Berkeley Street, Boston, Mass. Please mention RECREATION.

The President suspender, which is advertised in RECREATION, and which is made by the C. A. Edgarton Manufacturing Co., Shirley, Mass., is the most perfect article of the kind I have ever worn. When you need another pair of suspenders, try this brand. If your furnisher does not keep them, and offers you something "just as good," you should decline it, and should write the manufacturers for price list. In doing so, please mention RECREATION.

The Ideal Manufacturing Co., of New Haven, Conn., has issued its new Hand Book No. 14, which, as usual, contains a lot of new and valuable information to rifle, pistol and shot gun shooters. There will, of course, be the usual large demand for these books, and lest the edition be exhausted before all are supplied, it would be well to write for a copy at once. In doing so please mention RECREATION.

The Savage Arms Co., of Utica, N. Y., has recently issued a circular regarding rifle sights. This is the result of a great deal of study, of many experiments and of a large correspondence carried on by the Savage people, with users of rifles. Every big game hunter and every target shooter should have a copy of this circular, and can get it for the asking. Please say you saw it mentioned in RECREATION.

H. J. Putman & Co., Minneapolis, Minn., have issued the finest catalogue I have ever seen of hunting boots, shoes and moccasins. The illustrations are superb and the descriptive text is complete and specific in every way. If you expect to buy a pair of hunting boots, shoes or moccasins, I advise you to write for this catalogue at once. In doing so, please mention RECREATION.

Sept. 3, 1901.

Messrs. Hemm & Woodward,
Sidney, Ohio.

Gentlemen: I have tested the wick plugs to my satisfaction, and heartily recommend them to every sportsman.

Rupe Barmby, Boston, Mass.

The New Jersey Aristotype Co. is located at Nepera Park, N. Y., instead of at Rochester, as was stated in a recent number of RECREATION. The company belongs to the General Aristo Co., and the Eastman Kodak Co. is its trade agent.

THE GRIZZLY I DID NOT KILL.

C. M. COLEMAN.

It was in the fall of 1899, in the Gallatin basin, Montana, near the foot of Old Baldy mountain. I was a tenderfoot, with a quenchless thirst for the blood of a grizzly. My friends banked low on probabilities, but I still hoped. I had camped and hunted six months in Montana and Idaho, but no grizzly had fallen to my rifle, and the hunt was almost over.

Anceney had returned home. Levinski, the boy Charley, and I were moving camp. We stopped in a little park to repack the horses, and missing some articles, sent Charley back to find them. Becoming impatient over the delay, I called him loudly. I received no answer, but heard distinctly something crashing through the bushes in the creek, and supposed it to be Charley and his horse. I was vexed at his failure to answer, and commented severely on it to Levinski, who thought I had been deceived by the wind. I knew better, but said nothing, and we sat down to rest and wait.

My rifle was on my saddle, and my horse was grazing among the pack animals. Levinski's rifle was also out of reach. Hearing a further noise, I looked toward the creek, and saw a large black animal approaching us. I thought it was Charley's horse, coming through the high bushes. Levinski remarked at the same time that Charley's horse was returning bare-backed. This confirmed my impression, and I resumed our talk.

Suddenly Levinski threw himself backward, and rolling over and over down the hill, got up and ran, looking for his rifle. Turning, I saw a grizzly, as big as a cow, at the edge of the bushes, within 50 feet, rolling her shoulders, and snapping her jaws ominously. I was utterly helpless, having only a hunting knife, and she was so close that I felt sure if I moved she would rush. I believe she would have charged in another instant, had her attention not been directed from me to the horses, which took alarm, and rushed through the bushes with a great uproar.

At that instant Levinski returned, but had some trouble with his rifle, and when he did shoot the bear was passing behind some large trees, so he missed. At the sound of the rifle a cub, which we had not seen, ran back toward the creek, in an opposite direction from its mother. I rushed for my rifle, but my wretched cayuse was scared. Precious moments were lost in calming him and getting my rifle from the saddle, and though I ran my utmost, and almost burst a lung climbing the mountain, I never saw the bear again. The dogs overtook her, but were driven back, and she made good her escape. If I had had my rifle in hand at first, I should have had a splendid shot at the greatest game animal in the world, at such close range and under such favorable conditions that I should certainly have killed her.

Levinski had hunted bears for a living 15 years, killing over 200 in that time, many of them grizzles of the largest size, and he declared that one to be the largest he had ever seen; also the second black grizzly he had ever seen. She was within 100 yards of us when I called Charley, and must have heard me; yet she fearlessly approached us, with our horses and dogs, as if we had been a band of sheep.

We were both furious. I hope the attention of the recording angel was fully engrossed in another quarter during the next hour, and I can not yet recall the affair without losing self-restraint. Having exhausted our vocabularies, we remounted and resumed our journey, the dogs and horses seeming to share our gloom. Even killing a fine bull elk a few days later failed to cheer me. To this day I have not killed a grizzly, and shall probably never kill one. *Sic transit gloria mundi!*

Briggs: They say those India Yogis can keep their minds fixed on vacancy for hours at a time.

Griggs: That's nothing. I spent a whole week recently reading the short stories in the magazines.—Life.

NER'S
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YE
CAUTION!!
None Genuine
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HAYNER'S PURE RYE WHISKEY

DIRECT FROM DISTILLER
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4 FULL QUARTS FOR $3.20

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Our entire product is sold direct to consumers. You thus avoid adulteration and middlemen's profits.

If you want pure whiskey for medicinal purposes or otherwise, read the following offer. It will interest you.

We will send four full quart bottles of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for $3.20, express prepaid. We ship in plain packages—no marks to indicate contents. When you get and test it, if it is not satisfactory return at our expense and we will return your $3.20.

One hundred and fifty thousand customers throughout the United States use our whiskey—ample testimony as to its purity and quality.

Save the enormous profits of the middlemen. Such whiskey as we offer for $3.20 cannot be had elsewhere for less than $5.00.

Our distillery was established in 1866. Thirty-four years' reputation is behind our whiskey.

REFERENCES: Third Nat'l Bank, Dayton; State Nat'l Bank, St. Louis, or Express Co.'s.

WRITE TO OUR NEAREST ADDRESS

THE HAYNER DISTILLING COMPANY

226-232 West Fifth St., Dayton, O. **305-307 South Seventh St., St. Louis, Mo.**

N. B.—Orders for Ariz., Col., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., Wyo., must call for 20 qts., by freight, prepaid.

I guarantee the above firm will do as it agrees—EDITOR.

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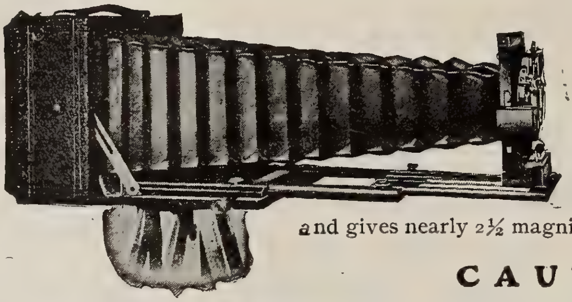

The Long Focus Cycle Wizard, Sr.

is elegant, rigid and serviceable. It not only has the longest bellows of any of its kind on the market, but is also unique in being provided with a magnificent TRIPLE CONVERTIBLE LENS SYSTEM, which UTILIZES this BELLOWS CAPACITY and gives nearly 2½ magnifications. We make our own Lenses.

CAUTION

It has come to our notice that lenses are being sold under a title whose similarity to ours is calculated to deceive the unwary. ALL OUR LENSES bear our name, and we caution the photographic public that we are in no respect whatever connected with any other firm or company. We respectfully request that when they ask for our product, they assure themselves that they are being supplied with goods bearing the name of the

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CRESSKILL, N. J.

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That
Anybody can take pictures
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REFLEX CAMERA
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A Camera, Focal Plane Shutter, and Focusing finder, showing full-sized image combined.

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Send for illustrated catalogue.

REFLEX CAMERA CO., Yonkers, N. Y.

Mention RECREATION

AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

THE BEAVER PICTURE.

I send herewith my negative vote in the matter of awarding to Mr. Balch the first prize in RECREATION'S contest. I have devoted over 10 years to the study of scientific photography, especially along the line of trick, or monstrosity, work. I have read carefully all articles that have been published on this subject, and I draw my conclusions from those articles, together with the experience I have had in this class of work. I agree with the writer in July RECREATION in every particular, with the exception of the size of the nearest beaver as measured on the negative. Before considering myself qualified to talk on this matter I took a photo of a stuffed coon, using a 5 x 7 Karona, at a distance of a trifle under 10 feet, and, after a careful measurement, the coon's length, exclusive of tail, was 1¼ inches.

Beaver are hard subjects indeed, chiefly on account of their shyness around things that have been recently disturbed. Unless the noise made by the opening of the shutter was slight, the beaver would have beaten a hasty retreat. They are sensitive in this particular, and really have more common sense than they are usually credited with. All objects on the negative being in sharp focus, would at once suggest the use of a small stop, and it would not be an easy matter to obtain a good negative even in the bright sunlight with a one second exposure. Therefore, Mr. Balch has evidently made a bungle about this. I have taken pictures of minks in Arkansas; and on account of the color of the animal it has been a difficult matter to get a good negative without the use of a small stop and plenty of time. If anything, the beaver is a more difficult subject, because of the lack of contrast between his color and the probable surroundings; and to say that those beaver remained absolutely motionless for the period it would require to impress the dry plate, is absurd in itself. It is my opinion, based on actual experience, that those beaver were killed and placed in a position as near to life as possible, and, after they stiffened sufficiently to insure their rapidity, they were placed in position to be photographed; thus accounting for the much talked about string. I did this same thing with a favorite dog that had been poisoned, and I challenge any person not familiar with the facts to prove that the dog is not alive. If you desire it, I will send you a proof to substantiate my statement.

E. C. Way, Lincoln, Neb.

Readers of RECREATION in this village have become interested in the beaver picture discussion, because we have some ground for thinking the picture may have been made on Blackwater brook, or one of its branches, in this county of Aroostook, instead of in Penobscot county, as claimed, and within 30 miles of this place. Also, things have come to our knowledge, outside of what has been written, which warrant the suspicion that the animals may have been dead when photographed.

But be these things as they may, there are 2 reasons why Mr. Balch must contend that the beaver were alive when the picture was made. First, because he so stated and therefore must continue to assert. Secondly, because, in this State, there is a perpetual close time on beaver, and has been ever since 1893. The original act creating said close time, which I drafted, would have expired by limitation in the spring of 1897, but before that it was renewed for another period of 6 years. Under the provisions of that act there is a penalty of $25 for each beaver caught, killed or destroyed. In 1899 the Legislature gave the Commissioners of Inland Fish and Game authority to grant permission to persons to take beaver; but I am informed they have never availed themselves of the authority given, except in a few instances to take beavers alive for park purposes. I assume, therefore, that Mr. Balch had no authority from the commissioners to take beavers. If he had, that fact can be easily ascertained by writing to Hon. L. T. Carleton, chairman of the commissioners, at Augusta, Maine. So it will be readily seen that if the animals in the picture were dead, somebody is undoubtedly liable for violation of the law, unless it can be shown that the beavers died of old age, whooping cough, cerebrospinal meningitis, or some other disease to which they are subject.

If the beavers shown in the picture were alive when the photograph was taken, then Mr. Balch richly deserves his $100, for he has performed far more than an ordinary feat in photographing them at work. If they were dead, then somebody should explain just how they came to their death.

Geo. H. Smith, Presque Isle, Me.

I have been closely following the discussion on the genuineness of the beaver photo by Mr. Balch. I do some hunting and trapping, and my experience in that line convinces me that the pictured beavers were dead. One important point your experts have overlooked. They say there is a string tied to the paw of the animal on the left of the photo. Don't you notice an upright switch a little to the left of the base of the tree the beaver is resting on? To steady the beaver against the tree, Mr. Balch propped its paw with that switch. Where the switch meets the paw it forks to the right and comes between the paw and the range of the camera. That part of the switch being more exposed than the rest, the light glistens on it and makes it appear white. As you say, the body does look unnaturally large around the chest. The eyes of the beaver on the right have the dull, glassy look of a dead animal's; but the damaging evidence on this beaver is its ears, which are laid back. If it was quietly cutting wood, as Mr. Balch claims, how is it that it had its ears back, a position they would assume only when the animal was frightened or in a fighting mood? The marks in the fur are immaterial; wet fur will often stick in bunches.

Byron Dickson, Olney, Pa.

I have read the whole controversy on Mr. Balch's beaver picture with much interest. From the comments of those who seem familiar with the habits of beaver. I have drawn my conclusions. I have had a little experience with photography, having been in the business 4 years, and have found it hard to get so distinct a picture at the time of day Mr. Balch claims to have taken his, especially at that time of year.

W. W. Wilson, Washington Depot, Conn.

Mr. Balch does not deserve any prize. I am an amateur photographer, and do not think such a negative as Mr. B.'s can be made after the sun is down, without giving at least one second's exposure, and I think 5 seconds would be better.

C. C. Spooner, Bull's Bridge, Conn.

I have taken many photos of game, and the 2 points that strike me as being most against Mr. Balch are the matter of light at 4 o'clock in the woods and the apparent distance of the camera from the beaver.

H. K. Bogart, Mesa, Colo.

PRACTICAL INTENSIFICATION.

One of the most common difficulties that worry the amateur is how to deal with thin negatives. Whether through ignorance or through a desire to secure all the detail in the beautiful scene before him, the negative is often much over exposed. Consequently, in developing it is impossible to get the requisite density, and the negative, although full of detail, will not yield anything but a flat mealy-looking print. To get the requisite density to give good contrast it is, of course, the proper thing to expose correctly, but as this is not always done the next best thing is to have recourse to intensification. Thin negatives, caused by over exposure or under development, are much improved by intensification, the high lights becoming more intense and the negative more vigorous. Under exposed negatives are often thin and the details imperfect. If slightly under exposed they may be improved by intensification, but if much under exposed and the detail is not there, intensification would only make matters worse, and nothing remains but to throw the negative away.

Many formulae have been advocated for intensifying, but that most commonly used is bleaching the negative in bichloride of mercury, and blackening again in dilute ammonia water or sulphite of soda. This answers well if carefully done, where only slight strengthening of the details is needed; but the real intensification is but little and hardly worth the risk to the negative.

There is risk in the process, and it is better to practice on some discarded negative before treating any pet subject. The principal cause of failure is lack of cleanliness in the dishes employed and want of thorough washing between the various processes. There must be thorough washing to remove all of the previously used chemical from the film.

A formula which I now use gives me the best satisfaction. I got it from a professional friend who uses it exclusively, and who purposely over exposes his negatives and afterward gets the required density by the use of this intensifier. The intensification is real, and care must be taken not to carry it too far. The solution acts in proportion to the amount of silver contained in the film, the high lights becoming more intense as they contain more silver, while the shadows containing less silver are less affected, thereby increasing the contrasts.

It is easily controlled, quick in action, and the solutions can be used repeatedly until they cease to act. For use prepare the following:

1.	Bichloride of mercury	96 grains
	Bromide of potassium	96 grains
	Distilled water	12 ounces
2.	Crystallized cyanide of potassium	90 grains
	Nitrate of silver	96 grains
	Distilled water	12 ounces

The solutions should stand 2 days before being used. The negative must be perfectly fixed and thoroughly washed. Place it in a tray containing sufficient of No. 1 solution to cover the plate. Rock the tray gently. If only slight intensification is desired remove before the plate has whitened through to the back and as soon as it has grayed all over the surface. For stronger intensification allow it to remain until it has whitened through to the glass.

The plate is then removed and washed thoroughly in running water to remove all the mercury solution; then immersed in a tray containing No. 2 solution, where it quickly changes and where it must remain until the grayness has all disappeared from the back, but no longer, as the cyanide in the solution would then begin to reduce the density. The plate should then receive a final washing which should be thoroughly done to ensure permanency. The secret of success in intensifying is to remove all the chemicals from the film before and after all operations by thorough washing.

Both solutions are deadly poison. They should not be used by anyone having cuts on the fingers or sores on the hands.—Wally, in the Camera and Dark Room.

DARK ROOMS EVERYWHERE.

When on a photographic tour it is sometimes desirable that the exposed plates be developed, to ascertain if proper exposure, composition, lighting, etc., have been obtained. Most photographers leave the developing of the plates until their return home, being under the impression that it is impossible to do otherwise. It is, however, a simple matter, and one that well repays the slight trouble involved. I have developed plates in log cabins, farm houses and city hotels, with perfect cleanliness, as follows:

Every room being a dark room at night, requiring only the closing of doors and drawing down of window blinds, the only articles necessary are 2 trays, one for the developer and one for the fixing bath; a folding candle lamp, one yard of oilcloth, a packet of powdered hypo and a bottle of developer. Also borrow 2 ordinary pails, each half filled with water. Laying the oilcloth on the table, pin the corners up so as to form a large dish, place the lighted candle lamp in the center with the developing tray in front and to the right side, the fixing tray in front and to the left side. Just behind the lamp place the 2 pails, one to the right and the other to the left. All operations will be conducted over the oilcloth dish, and not one drop of any kind can fall on the floor.

Close and fasten the doors, throw a towel over your shoulder, draw a chair up to the table and sit down. Take the first plate from the holder, rinse it thoroughly in the pail on the right side of the table, place it in the developing tray, and, when developed, rinse off again in the same right-hand pail, to stop developing. Having carefully inspected the plate pass it over and into the fixing tray, where it remains while plate No. 2 is being developed; after which the first plate is removed from the fixing bath to the left-hand pail, slightly rinsed, and stood up on end, face in toward the sides of the pail; the second plate, meantime, going into the fixing bath. Leave the plates in the left-hand pail an hour, after which stand them around the outside of the pail to dry and pack them in the morning. These negatives, of course, contain some hypo, which would in time spoil them, therefore wash them thoroughly on returning home.

To change the plates in the holders during the daytime, draw down the blinds, making the room as dark as possible. Turn down the bed covers and place the holders with the exposed plates in the center of the bed, with a box of unexposed plates alongside. Replace the bed covers, and by passing the arms underneath, one can, without difficulty empty and refill the holders. The film side of the plate is easily recognized by aplying the finger nail. Place the exposed plates in the box and close it before lifting the covers.—W. B. Blackhall, in the Canadian Photographic Blue Book.

CHAT HERE AND THERE.

Waxed paper such as is used to wrap around butter is a fair makeshift for a tray. I used 2 pasteboard boxes recently for developer and hypo, merely pressing 3 thicknesses of this paper down in the boxes first. A ream of such paper costs about 25 cents, and it will be found excellent for this and other photographic purposes. A funnel made of any stiff, clean paper is just as good to return chemicals to their bottles with as a glass funnel, and does not have to be washed, since it is cheap enough to throw away each time.—E. W. Newcomb, in the Photo American.

Did you ever have a plate fall into the camera when the slide had been drawn from the holder? It sometimes happens, and one need not lose the plate if he happens to wear a dark coat. Cover the front of the camera with the coat, push the hand up one sleeve and remove the lens and front board while the bellows are extended. Let the lens stay in the sleeve while you put your hand through to the plate, and then by turning the camera over, the plate can be replaced with one hand.

A handy little instrument is a reducing glass. It is merely a round, double concave bit of glass on which I pasted a few strips so as to form a parallelogram, but that little tool tells me at a glance whether things compose or do not, and aids me in making them compose if they do not. One can not take in a whole landscape or room so well by looking at the scene itself as by looking at a reduced picture of it, and that is where the reducing glass comes in.

It is remarkable what a great improvement is effected by ruling a line around a print, on the mount, with a blunt instrument. A dulled punch a knitting needle, or, for wide lines, a piece of bone, will indent a line on the softer cardboard, and, properly done, the labor is well rewarded. I have made several points of bone, and rule ordinary dark cover paper close to the print with one or another of these tools, to the great betterment of my picture.

Transparent celluloid diaphragms, dyed slightly yellow with picric acid, may be used for ray filters, diaphragms, and to afford nearly as much light on the plate as full opening would, yet yielding the effect that the real opening in the diaphragm does ordinarily as regards definition. Diaphragms made of wire screen have been used to obtain light and definition at once, but this wrinkle is better, and is not impracticable.

Excellent thin brass for pinhole photography can be secured by buying a cheap card of pearl buttons. What the brass is there for is not made known, but it is the best and thinnest brass I know of.

COMPOSING THE PICTURE.

Never place the principal object exactly in the center of the plate; nor the sky line half way up the plate. These are 2 well-worn art rules.

They are so far correct that in 99 cases out of 100 the final picture of a pictorial worker follows them more or less closely. Yet if you were present when the worker was composing his picture on the ground glass, I think you would often find him wildly transgressing these laws. An almost safer law for the beginner would be: Get in as much as you think advisable on your screen, as much sky and as much foreground as you think you may possibly need. In fact, take in rather more than you will need. Allow plenty of margin around the edge of your future picture. Compose only as far as the main objects and the general *motif* are concerned. Leave questions of shape and size till later.

The view on the ground glass screen should merely be the egg of the final picture. It is a work of art in embryo. The real business of polishing it up, of toning down, of adding final touches, of cutting out what is not wanted, and so on, comes only with the trial proofs. Each print should be carefully considered, carefully cut, carefully sunned. This, after all, is the true composing.

The trimming knife is, in the hands of the skilled worker, the most useful aid to composition in existence. Ruthlessly cut away everything that is not absolutely necessary, that does not contribute some real help, to the *tout ensemble.* Do not be afraid to make your print small, or of an odd shape. Narrow prints, upright or horizontal, are often highly effective; but do not be pinned down to one style. Let each picture be just the right shape for itself, whatever that may be; and do not shirk seeking long and carefully till the right shape is discovered. Remember always that you are trying to produce a composition of your own brain; not an advertisement for your lens.—*Photography.*

PROTECT YOUR LENSES.

Few photographers realize the care taken in the manufacture of a first-class lens. There is scarcely an industry in which the standard of workmanship is so high; yet a lens, when it reaches the photographer, frequently receives no more attention than any other portion of his outfit. After many years' use, the surface of a lens, with ordinary care, should be in as good condition as when the instrument left the optician's hands; but how many do we see free from scratches, or from blemishes? The durability of a lens was forcibly impressed on my mind recently by seeing one the surfaces of which were in perfect condition, although the lens had been in use 10 or 12 years. If lenses are left attached to the camera, keep them capped when not in use. If taken for use out of doors, carry them in a substantial leather case. Clean your lenses periodically and keep them in a dry place, where the temperature is even. To clean the lenses, unscrew them from the tube and carefully dust them with a camel's hair mop; then moisten the corner of a perfectly clean old linen duster with methylated spirit, and, after wiping each surface, rub it quite dry and polish it with the other end of the duster, folded into a small pad. The chief thing to avoid is the rubbing of any dust or grit on the surface of the lens and thus scratching it. It is, therefore, recommended that each surface should be dusted with the brush, and that only well washed, soft linen rag should be used for the polishing cloth. Dust the lenses again before returning them to the tube. They should be screwed well home, but not too tightly, or the lens may suffer. —The British Journal Photographic Almanac.

ON EXPOSURE.

I wonder how many amateurs ever made a calculation of the latitude their instrument gives them in the matter of exposure when making snap shots.

Take the case of an ordinary lens and shutter for snap shot work, an ordinary make of plates, a lens working at f/8 to f/64, a shutter with speeds from 1 second to 1-100th second, and, say, Cramer plates, ordinary to special rapid, and I think it will surprise many amateurs to know that the greatest possible snap shot exposure with these combinations is 38,400 times the least possible.

This takes no account of the light, the other great factor in exposure calculations, which introduces a still greater range. The calculation considers only the mechanical adjustment of the instrument and the plate speed.

I am not insulting the great body of amateurs by suggesting that anyone, even the veriest tyro, would be so fatuous as to use either of the extremes of combination given above. But I know of an actual case, revealed by a beginner's note-book, in which 2 exposures made within 20 minutes one June evening were as 1 to 80. The exposures were made from a window, in the hope of catching a fine effect of lighting. On developing the first, sufficient over exposure was shown to lose the desired effect. The second exposure was immediately made, and, on development, of course there was not a sign of any fine effect on the plate. My friend was astounded when I pointed out that the second exposure was 80 times less than the first.—Amateur Photographer.

PHOTOGRAPHY IN THE PUBLIC SCHOOLS

I do not wish to advocate an additional burden for the already overtaxed brains of school children and make the study of photography in all its various branches obligatory. That would probably take from our beautiful art and fascinating science a great deal of its charm. I shall be satisfied if this article creates an interest in and a discussion of the question. The teaching of the fundamental principles of photography in school, with some practical illustrations, can be made a joyful and useful pastime to the little student.

There is no other educational factor which could possibly have a greater influence on a child's character and faculties than the practical and intelligent use of the camera. It trains the eye early to form a quick judgment of visual objects. It compels the child to concentrate its attention. It forces it to be careful and clean, if it desires excellence and superiority. With advancing expertness and skill, the child will be ready for the scientific instruction. The first want is a compendious book, which sets forth in plain language the great features of the science, without perplexing the beginner with too much detail. In this respect many of our most popular works are defective.—Johannes Meyer, M. D., in the Camera and Dark Room.

SINGLE TONE FOR PLATINO.

Can you give a formula for making Aristo single tone for platino paper?

Would it be a good idea to take a developing formula, powder the chemicals and mix together, then, when you want to develop, dissolve the necessary quantity of the powdered chemicals in the proper quantity of water?

F. K. Beek, Galion, O.

ANSWER.

The only formula I can recommend is that sold by the American Aristo Company for obtaining black tones without the use of gold first and then platinum. Hypo must be used afterward to fix. There is no combined toner and fixer, if that is what you mean, that I would recommend for platino. If such a thing exists Mr. Tom Pattison, of Jamestown, N. Y., care of American Aristo Company, will tell you of it.

I do not believe you could mix the various chemicals intimately enough to use portions of powders. You would be likely to get too much of one thing and too little of another. Some do this sort of thing with drugs and believe it right, but I don't like the proposition.—Editor.

TOO MUCH EXPOSURE.

I am using a 5 x 7 Al-Vista camera, and crown plates. So far I have not been able to make a decent print. I use Solio paper and Eastman's developing powders. I thought I was getting a good camera when I bought a 7f Al-Vista, yet my plates are yellow; not clear and transparent, as I think they should be.

C. N. Truman, Ash, Col.

ANSWER.

From your account it would appear you are giving far too much exposure. Wide open lens and bright sunlight would require an exposure of about 1/200 second in your clear atmosphere, and it is a wonder you got anything at all.

Your camera is all right, as are the developing powders and paper. Try a dozen Carbutt B plates, and when the light is good get a focus with wide open lens; then stop down to f32. Give 2 seconds in bright light if the scenery is fairly open; one second if very extended, such as a distant view from an eminence, and 4 or 5 seconds if in the shade and the object is near. I am sure I shall have better reports from you if you follow this advice.—Editor.

HOW TO PROTECT YOUR FINGERS.

Take 5 or 6 discarded 4 x 5 films, place them in a tray and pour hot water over them, or better still, immerse in a solution of caustic lye for an hour or 2; wash, then dry, trim, cut into narrow strips and put in a wide-mouth bottle, and pour in a mixture of 2 ounces of alcohol and 2 ounces of ether. This will readily dissolve the celluloid. Add ⅛ ounce of castor oil. This is essential, as it prevents the film from cracking. After the mixture is dissolved each finger should be dipped into it and the hands swung rapidly around for 2 or 3 minutes so the solution can set. The hands must be thoroughly dry before applying. This will protect them all the time they are in the solutions, either developing or toning. After it is no longer required it may be dissolved off with a mixture of alcohol and ether, or sandsoap and a nail brush, leaving the hands white and stainless. For those who are poisoned easily by photo-chemicals this is a capital substitute for rubber gloves, which are always cumbersome and decidedly unhandy.—Camera Craft.

TO TRANSFER FILMS.

It often happens that a negative cracks so the film is not broken, and with a new glass under the film it would be just as good as ever. Put the negative in a tray containing one drachm of hydrofluoric acid in 10 ounces of water. Soon the edges will begin to pucker. Then the whole film raises without aid. Transfer to thin celluloid, face down. The thin celluloid, like rollable film in thickness, forms a good protection to the face, and a carbon can be printed from the back by single transfer. It is much more difficult to transfer to thin celluloid than to glass, for unless watched, and the clips changed, it will buckle and ruin the print. Immerse the celluloid under the film, draw both up carefully, and stretch out on a glass plate; then smooth down the emulsion on to the celluloid and clip the whole tightly to the glass. Use a coat of albumen first, on either glass or celluloid, to make the film stick. Slight enlargement may ensue, though not generally, if the plate had an alum bath.—Professional and Amateur Photographer.

A RECREATION CAMERA CLUB.

The suggestion by L. Goodrich, San Antonio, Tex., in September Recreation, is a most excellent one. By all means let us have a Recreation camera club, meeting every summer in some picturesque resort. Professional photographers have a convention yearly; why can not we have one? Hundreds of us would be delighted to meet kindred spirits a week or so each year. Let us choose a central point noted for its scenic beauty and hold our first convention next summer. We could no doubt obtain special railroad rates, and the expense of such a trip need not be great. We might arrange for lectures on photography by eminent amateurs. At any rate we could learn much by comparing pictures and talking them over. If Mr. Shields will have a button designed for our club, we will wear it as proudly as the L. A. S. men wear theirs. Flood Recreation with letters on this subject, and we'll have a great time next summer.

Homer G. Gosney, Savanna, Ill.

INTENSIFICATION WITHOUT MERCURY OR CYANIDE.

Make up the following:

No. 1.—Potassium bromide....	120 grains
Water	2 ounces
No. 2.—Sulphate of copper....	240 grains
Water	2 ounces

Mix, and if necessary filter. Bleach the negative in the above solution; then give it a brief rinse, and redevelop the image in any developer except pyro-ammonia. Wash and dry. If preferred, the darkening may be produced by immersing the negative in a 5 per cent. solution of silver nitrate. Then refix and wash. The first method is simple, and will be found satisfactory in most cases.—Photographic Record, Manchester, England.

TO DETECT HYPO.

Pour into a deep tray a small quantity of the water or solution and throw in a few pieces of granulated zinc, after which add a few drops of hydrochloric acid. Place above the tray a filter paper wet with a solution of acetate of lead. If the least trace of hyposulphite remains in the solution, the paper will become brown, and afterward assume a black metallic appearance. This action is due to the formation of hydrogen sulphide, which escapes to the surface and colors the paper by forming lead sulphide. In this way it is always easy to determine when the washing is finished or to examine a solution suspected of containing hypo.—Photographer.

SNAP SHOTS.

I have a camera, 4 x 5, made by the Manhattan Optical Company. It has a double lens and the focal length is f8. To make a picture sharp to the corners I must use 16 stop and the sun must be shining bright. Exposure must not be longer than 1-5 of a second. Can I get a lens that will give the same results under the same circumstances by using a 4 stop?

L. H. Plummer, Chicago, Ill.

I have made thorough tests of the Nepera Chemical Company's new tablet developers called Lotol and find them excellent. They are cheap, uniform and give splendid results in every way. Those who do not care to be annoyed by using the M. Q. formulæ, and use prepared solutions, will find this a great convenience and saving while excellent results are attained.—*Exchange.*

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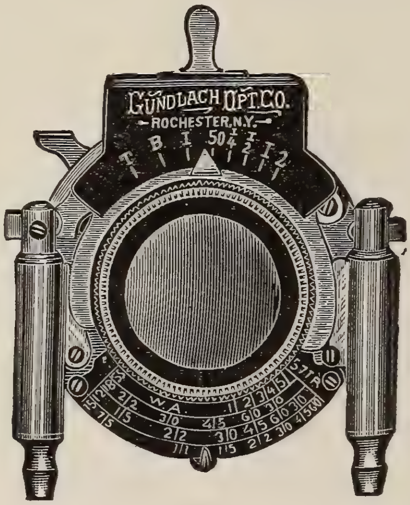

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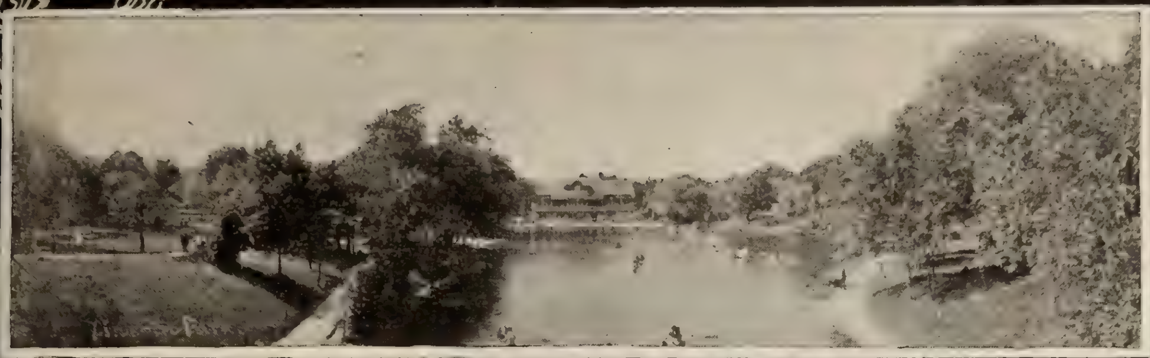

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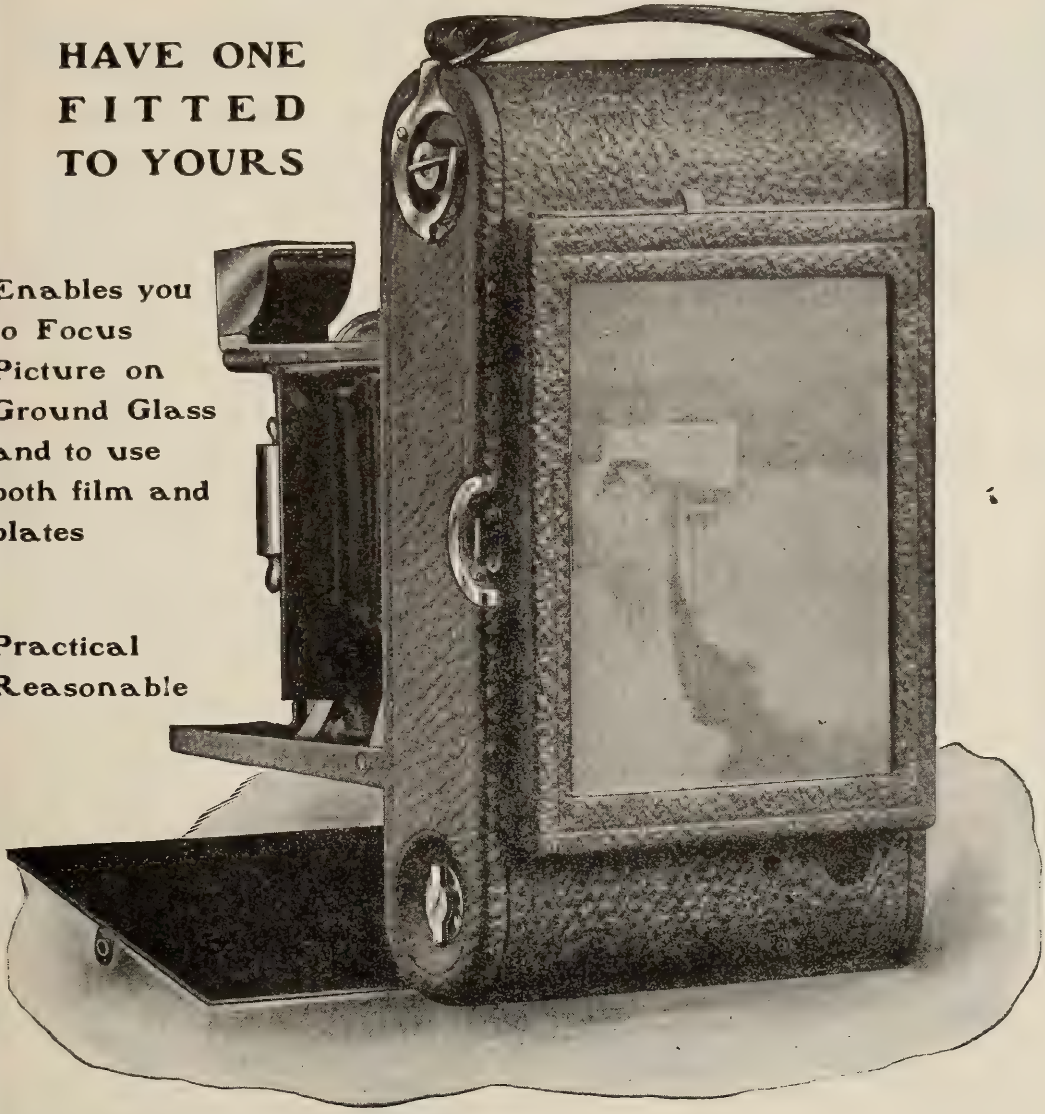

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The latest and best article for filling in holes in the negative, as no spot will show on the print. Also for touching up all black and white prints. Two shades of medium to match any tint. Anyone can use it, and improve negatives and prints amazingly. Spot your negatives before printing, or before sending them to be printed. for best results.

My booklet, "Halation, What It Is and How to Prevent it; also Hints on Spotting Negatives and Prints, Developing, Reducing, Intensifying." With Illustrations. Sent free. *Be sure to postal me for this booklet.*

EDWARD W. NEWCOMB - - 132 Bible House, NEW YORK, N.Y.

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A Good Formula Free

To save plates use a Wager Exposure Scale. It tells you the correct exposure in every case, and saves its cost in a month. No sensitized paper, no multiplying in the head—that's a nuisance, and besides you may make a mistake. Endorsed by the Editor of RECREATION. Post free, 50 cents. Aluminum $1.00. Your money returned if you don't like it. Send a postal for our Booklet No. 5, lots of hints and formulæ.

Wager Exposure Scale Co., Box 539, **Philadelphia, Pa.**

FREE DESCRIPTIVE BOOKLET ON HUMIDITY.

The Polymeter is an instrument to measure the percentage of relative and absolute Humidity.

Invaluable in testing the air we breathe, whether too dry or too moist.

Indispensable in forecasting rain, storms, frost or clear weather.

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ESTABLISHED 1842.
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Photographs on Cloth.

If they become soiled or mussed, can be washed in cold water (no soap), and ironed with a clean hot iron. Designs include Official Photos of Pan American Buildings and Niagara Falls. Sent by mail. Sensitized Prepared Cloth, with full directions for printing from your own negatives, sent by mail at $1 a square yard; 50c. ½ yard.; 35c. ⅓ yard.

N. POMEROY, Jr., Lockport, N. Y.

TO EACH PERSON

Sending $1.00 (P. O. Money Order) for Subscription to RECREATION, I will send, in addition, a Pocket Compass, 1 inch in diameter, polished brass, open face, watch case style, glass-covered dial, ring handle.

EDWARD S. ADAMS,
Box 536. Manchester, N. H.

MAGIC LANTERNS
STEREOPTICONS and VIEWS

for Public Exhibitions, Church Entertainments, for **illustrating sermons.** Many sizes. All prices. **Chance for men with little capital to make money.** 260 page Catalogue **FREE.**

McALLISTER, Mfg. Optician, 49 Nassau St., N. Y.

I will send by registered mail, post paid, 50 5x7 views printed on either Vinco, Solio or Velox paper, and mounted in a Buechner album, for $8. These views are of live and dead game, mountain scenery, lakes, waterfalls, fishing scenes and park views. A sample print will be sent for 15 cents in stamps.

S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—EDITOR.

OIL PORTRAITS ON APPROVAL

If you will send me a photo of yourself or a friend and state color of hair, eyes and complexion I will paint and send you on approval a miniature oil portrait.

Canvas 6x8 or 8x10 inches,	$ 8.
Canvas 10x12 or 12x14 inches,	$12.

Z. EMMONS, 58 West 104th St., New York
Reference: Mr. G. O. Shields.

SEND $1.25 For handsome and durable **Hand Carved Leather Belt.**

The Latest Fad in Leather Novelties.
E. M. HUFF, Forsyth, Mont.

SIX 5 x 7 PHOTOS FREE OF CHARGE.

George E. Moulthrope, Photographer, Bristol, Conn., will send every person remitting him $1 00 by P. O. order for a year's subscription to RECREATION, and 10c. for ostage, **6 Elegant 5 x 7 Photos on 8 x 10 Mounts.** 'he photos are from the choicest of several hundred negives: "Strings of Game Hanging," three of each kind; 'In the Field Series," from life; "Mounted Specimens," artistically posed true to life. Reference as to quality of photos, **Mr. G. O. Shields.**

THESE APPROVE OF RECREATION.

Though but a short time a reader of RECREATION, I look forward to its coming each month and greatly enjoy reading it. The principles advocated by you touching game and fish protection and forestry reserves can not be too highly commended. These are deeper questions than the average citizen of this country seems to recognize. They mean food and prosperity to millions yet to come. May your good work go on.

P. W. Humphreys, Clarksville, Tenn.

The Indiana Union of Literary Clubs is to be congratulated on securing the services of G. O. Shields, Editor of RECREATION, for an address. Mr. Shields is one of the ablest of the workers for the protection of animal life, and has accomplished greater practical results than any one else in the field. His policy of striking at the marketman who sells game birds out of season is the winning one.

Indianapolis Sentinel, May 3.

The address of Mr. G. O. Shields, published in yesterday's Journal, on "Bird Lovers and Bird Destroyers," was one of the most forcible pleas for bird protection that has come from any quarter. With such facts and arguments before them as were presented in this address it is difficult to see how the lawmakers of any State can fail to do their duty in this regard.—Indianapolis Journal, May 3.

I wonder if all your readers admire and enjoy the excellent poems found in RECREATION. In the May issue there are 3 or 4 poems are alone worth more than a year's subscription to the magazine. How you find so many really unique writers I cannot understand.

John Lewis Childs, Floral Park, N. Y.

RECREATION is O. K. I thought when I started to get up a club I should have a hard job on my hands, but found myself mistaken. I spoke to 15 persons about RECREATION and 12 of them took it at once. Everyone knows of it and almost everyone wants it.

H. B. Gay, Chico, Cal.

RECREATION has come to stay with me. It is the only sportsmen's magazine published to-day. I hope you may continue to print it until it shall pull all the bristles from the backs of the game hogs. Soak them all and soak them hard.

F. W. ALLARD,
Atlanta, Ga.

I am entirely satisfied with the Harrington & Richardson single gun, sent me as a premium for 5 subscriptions, and hope in the future to give you some more subscriptions.

L. A. Whipple, Greenville, R. I.

May I Send You A Book?

I will mail you any book from the list below if you send me your address.

With it I will send you an order on your nearest druggist for six bottles of Dr. Shoop's Restorative. If you think that you need it after reading this book, you are welcome to take it a month at my risk. If it cures, pay your druggist $5.50. If it fails, I will pay him myself.

This remarkable offer is made after a lifetime's experience. I have learned how to strengthen the inside nerves—those nerves that alone operate every vital organ. I make each organ do its duty by bringing back its nerve power. No case is too difficult. I take the risk in all.

In five years 550,000 people have accepted this offer; and 39 in each 40 paid. They paid because they were cured, for no druggist accepts a penny otherwise. The decision is left with you.

Note that if my Restorative cures, the cost is a trifle. If it fails, it is free. Can you neglect such an offer when 39 out of 40 who write me are cured?

Simply state which book you want, and address
Dr. Shoop, Box 214,
Racine, Wis.

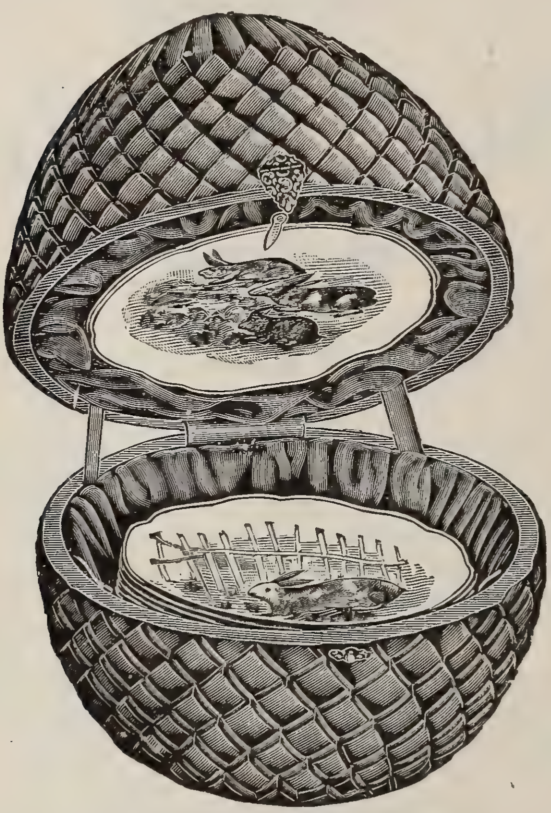
Book No. 1 on Dyspepsia.
Book No. 2 on the Heart.
Book No. 3 on the Kidneys.
Book No. 4 for Women.
Book No. 5 for Men. (sealed)
Book No. 6 on Rheumatism.

Mild cases, not chronic, are often cured by one or two bottles. At all druggists.

A Useful, Beautiful and Timely Holiday Present

For your mother, your wife, your sister, or some other fellow's sister.

A full set of Welsh Rabbit plates, beautifully decorated with bas-relief figures of rabbits in action.



No Two Plates Alike

The set is contained in a case, which is an exact imitation in color and form of a large pineapple cheese. This case is lined with yellow satin, and, when placed on a table properly spread with glassware and silver, makes a most beautiful showing.

The Set of Plates and the Case sell at $8.

For the next thirty days I will give one of these sets, **complete with case,** to each person sending me

5 Yearly Subscriptions to RECREATION

This is one of the most liberal premium offers I have ever made.

If you act on it at once you can get the set of plates in ample time for Christmas.

You can get the 5 subscriptions in an hour in any live community. Try it and see.

The Swoboda System

Restores to Health, Strengthens the Heart.

The BEST LIFE INSURANCE

"Adds not only years to one's life, but life to one's years."

I AM TEACHING intelligent men, brain workers, the ideal principles of attaining and preserving perfect health. It is not a problematical theory, but a system of physiological exercise based upon absolutely correct scientific facts. And if you will follow my instructions for a few weeks I will promise you such a superb muscular development and such a degree of vigorous health as to forever convince you that intelligent direction of muscular effort is just as essential to success in life as intelligent mental effort. No pupil of mine will need to digest his food with pepsin nor assist nature with a dose of physic. I will give you an appetite and a strong stomach to take care of it; a digestive system that will fill your veins with rich blood; a strong heart that will regulate circulation and improve assimilation; a pair of lungs that will purify your blood; a liver that will work as nature designed it should; a set of nerves that will keep you up to the standard of physical and mental energy. I will increase your nervous force and capacity for mental labor, making your daily work a pleasure. You will sleep as a man ought to sleep. You will start the day as a mental worker must who would get the best of which his brain is capable. I can promise you all of this because it is common sense, rational and just as logical as that study improves the intellect.

I have devoted years to the study of anatomy, physiology, pathology, histology and hygiene; also to the effect and influence of physiological exercise upon the nervous system and the process of digestion and assimilation. This scientific and thorough study which I have made of the physiological effect of exercise, such as the physical and chemical changes which take place in the blood and every cell and tissue of the body, has never been undertaken by any other instructor or scientist. This knowledge combined with vast experience enables me to adapt my instructions successfully to all conditions of health, and to all ages of either sex.

Absolutely Cures Constipation, Indigestion, Sleeplessness, Nervous Exhaustion and Revitalizes the whole body.

WELLSVILLE, Ohio, Oct. 19, 1901.

Alois P. Swoboda, Chicago—Dear Sir: I have delayed writing you relative to the effects and advantages of your system until time had confirmed its promises and realties. I am now enabled to write and give your system unstinted praise, and will be pleased to recommend your treatment wherever and whenever called upon. It is all you claim for it and only requires of your students a conscientious application. I have not had a headache since commencing the exercises under your direction and can say to all inquirers to "throw physic to the dogs."

You are welcome to this endorsement and hope that your business will meet with all the success it merits

Yours truly, (Signed) A. G. MACKENZIE, Justice of the Peace.

My system is taught by mail only and with perfect success, requires no apparatus whatever, and but a few minutes' time in your own room just before retiring, and it is the only one which does not overtax the heart.

I shall be pleased to send you free valuable information and detailed outline of my system, its principles and effects, together with testimonial letters from pupils.

ALOIS P. SWODOBA,

454 Western Book Bldg., Chicago, Ill.

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THE OVERLAND ROUTE
WORLD'S PICTORIAL LINE.

Land Marks

Made famous by the early Traders, Explorers, Pioneers, Mormons, Emigrants, Pony Express Riders, Overland Stage Coaches, Indian Encounters, etc., are seen from the car windows of the Union Pacific trains.

In traveling over this line you can see the wonderful achievements of the Union Pacific engineers over mighty chasms, lofty peaks, and through mountains of solid rock.
Be sure your ticket reads OVER THIS ROUTE.

E. L. LOMAX,
Gen'l Pass'r and Ticket Agent,
OMAHA, NEB.

THE JOHNSVILLE HUNT.

The Johnsville hunt took place Wednesday. The competitors swore to their count before Justice Emans. The hunt resulted in a victory for the Adams team by a large margin. Edward Adams, the captain, won the prize for the best score.

The count was as follows:

ADAMS' TEAM.

Edward Adams	260
W. J. Corbin	30
B. Hustis	106
W. Way	95
W. Barber	115
C. Ross	70
C. Jones	70
Al. Hickman	107
C. Wilson	220
Oliver Waldo	20
R. Horton	165
W. H. Dotterer	000
F. Heady	35
J. Booth	90
Total	1,383

HAIGHT'S TEAM.

Arvis Haight	110
Ralph Haight	116
Moncure Bartow	140
S. Gregory	105
Charles Ortman	165
C. Ross	40
H. Stevenson	30
W. H. Jones	81
J. Waldo	60
G. Wiley	05
D. Smith	000
R. Wright	50
J. Wood	45
N. Townsend	20
Total	967

Another corner of Darkest Egypt heard from. If Miss Stone had gone to Johnsville to educate the ignoramuses of that region out of their besotted condition, she would have been doing a much more rational work than laboring with the barbarians of the Eastern hemisphere, and her friends would not now be trying to buy her from the brigands for something like $1,000 an ounce avoirdupois. Here are 28 men who are lower down in the ethics of field sports than the lowest type of Australian bushmen are in the school of ordinary human intelligence. I wish every reader of RECREATION would spend 5 minutes in writing postal cards to the captains of these 2 Johnsville teams conveying to them in as few words as possible the contempt in which side hunters are held by decent people.—EDITOR.

SIX CARDINAL POINTS

THE OLD WAY — THE NEW WAY

SELF-FILLING.
SELF-CLEANING.
SIMPLICITY.
RELIABILITY.
NO LEAKING.
DURABILITY.

THE OLD FOUNTAIN PEN IS A THING OF THE PAST.
Advanced mechanism places the "POST" Pen as the foremost one of the world.

"IT'S THE PEN OF ALL PENS"

and is receiving more favorable comments to-day than all other makes on the market.
It's the only Pen awarded a gold medal and diploma at the Academie Parisienne Inventeurs Industriels et Exposants, Paris.

The "POST" FOUNTAIN PEN

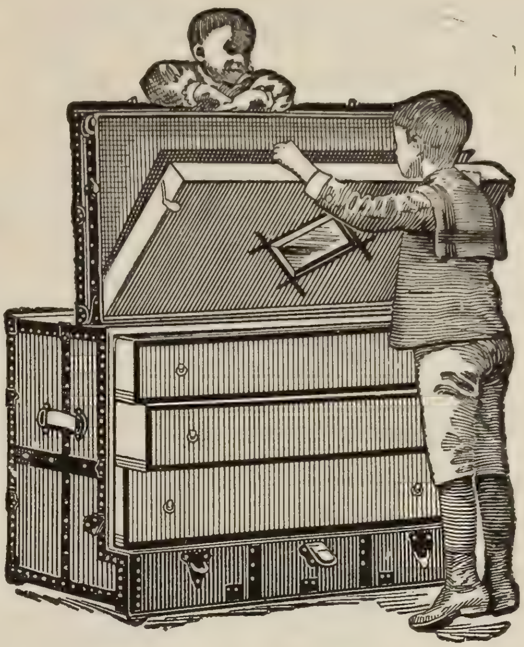
WE TAKE YOUR OLD PEN IN EXCHANGE

...OUR UNIQUE PLAN...

As a special inducement to introduce the "**POST**" we have decided to supply a limited number of them in **EXCHANGE** for the old style at a merely nominal cash difference. Our offer enables you to rid yourself of your old pen and have the BEST. The "**Post**" has been endorsed by General Lew Wallace, Dr. Lyman Abbott, Mr. Sankey, H. M. Edward VII., King of Great Britain, Com'd'r Booth Tucker, and hundreds of others, also recommended by over two hundred of America's foremost magazines.

WRITE US

Post Fountain Pen Company,
114 WEST 14th STREET, NEW YORK CITY.



Stallman's Dresser Trunk

Have you seen one? It is up-to-date. Think of it, everything within reach. No heavy trays, but light, smooth drawers. Holds as much and costs no more than a good box trunk. Hand riveted, almost indestructible. Once tried, always recommended. Sent C. O. D., privilege examination. 2c. stamp for catalogue. Mention RECREATION.

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87 W. Spring St., Columbus, O.

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Unrivaled Scenery.
Variable Route Tickets going and returning.
Personally Conducted Excursions every Tuesday and Thursday.
All Meals in Dining Cars. Double Drawing-Room Sleeping Cars;
Buffet-Smoking and Library Cars (with barber). The Best of Everything via

CHICAGO & NORTH-WESTERN, UNION PACIFIC AND SOUTHERN PACIFIC RAILWAYS.

The Overland Limited leaves Chicago 8.00 p. m. daily and arrives San Francisco 5.15 p. m. the third day. The Pacific Express leaves Chicago 10.00 a. m. daily and arrives San Francisco 4.15 p.m. the third day. The California Express leaves Chicago 11.30 p.m. daily and arrives San Francisco 8.25 a.m. the fourth day.

ALL AGENTS SELL TICKETS VIA THIS ROUTE.

3 TRAINS DAILY

THE Keeley Cure

Alcohol, Opium, Tobacco Using Produce each a disease having definite pathology. The disease yields easily to the Treatment as administered at the following Keeley Institutes:

I HAVE said many times and I want to repeat it here, that Dr. Keeley has done more for the country, has saved more unfortunate men, than any one man in the United States. I honestly believe that, and you believe it; you must believe it. We are all obliged to believe what we see and know is true. See the thousands and thousands and tens of thousands all over this country that have been saved by the Keeley Cure.

Gov. D. M. CLOUGH, Minnesota.

Detailed information of this treatment and proofs of its success sent free upon application to any of the institutions named.

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West Haven. Conn.
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Marion, Ind.
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"Non-Heredity of Inebriety," by Dr. Leslie E. Keeley, mailed upon application.

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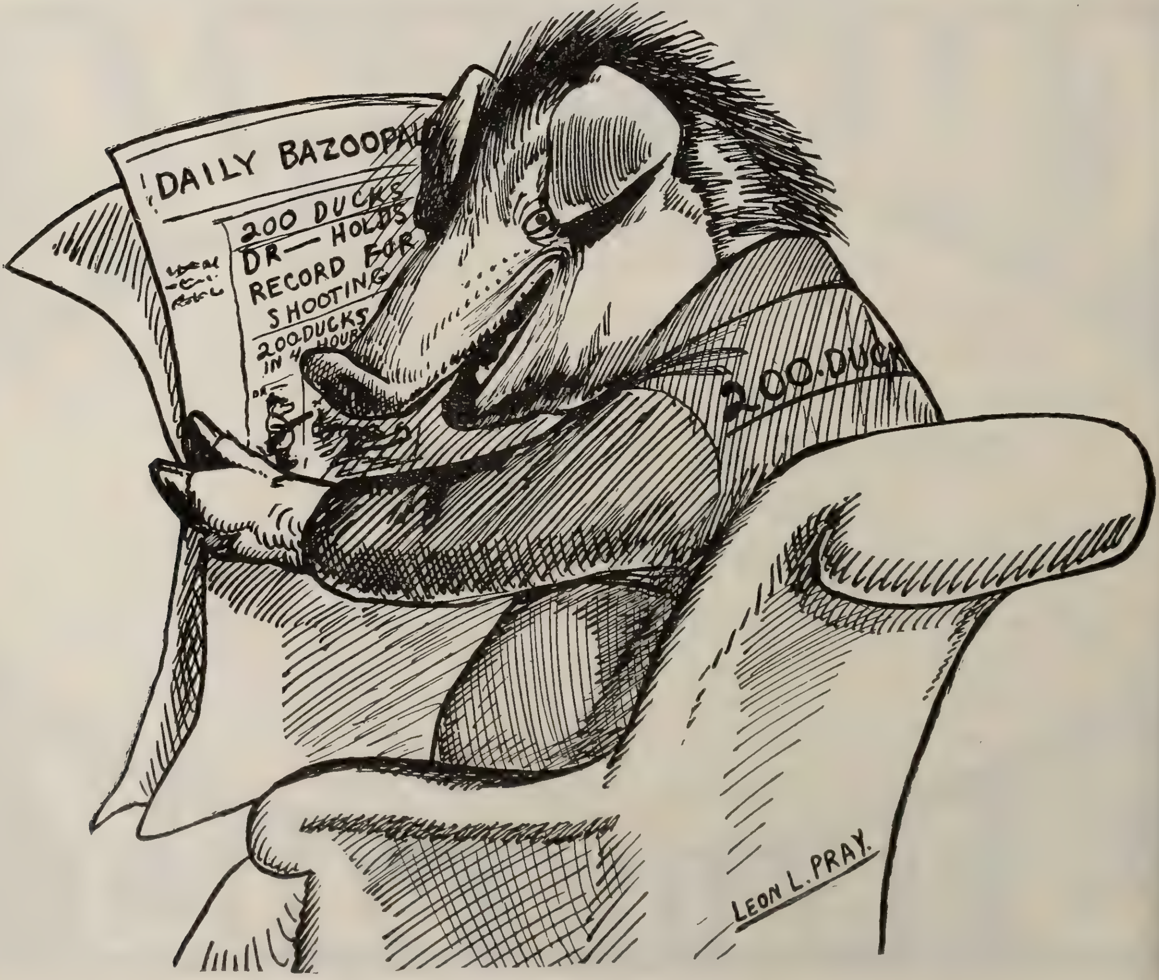
DAILY BAZOOPA
200 DUCKS
DR— HOLDS RECORD FOR SHOOTING 200 DUCKS IN 4 HOUR
200 DUCK
LEON L. PRAY.

But just wait until RECREATION gets hold of him.

SKATES

FORTY STYLES

To avoid FRAUD see that THE NAMES OF BARNEY & BERRY ARE STAMPED ON EVERY FOOT PLATE.

SIX GRADES

Send Postal To-day for our

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And make your selection before the ICE IS READY. The famous BARNEY & BERRY Skates are sold EVERYWHERE but if your dealer hasn't the style you desire, we'll sell you direct.

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101 Broad St. Springfield, Mass.

PRESIDENT SUSPENDER

The ideal suspender. Moves with every bend of the body. Perfect adjustment. Trimmings can not rust. Beware of substitutes. The name **"President"** on the buckle insures the genuine. New model now ready for men of heavy work. Also small size for boys. Sold everywhere, 50c., or by mail postpaid, on receipt of price.

C. A. EDGARTON MFG. CO.,
Box 219, Shirley, Mass.

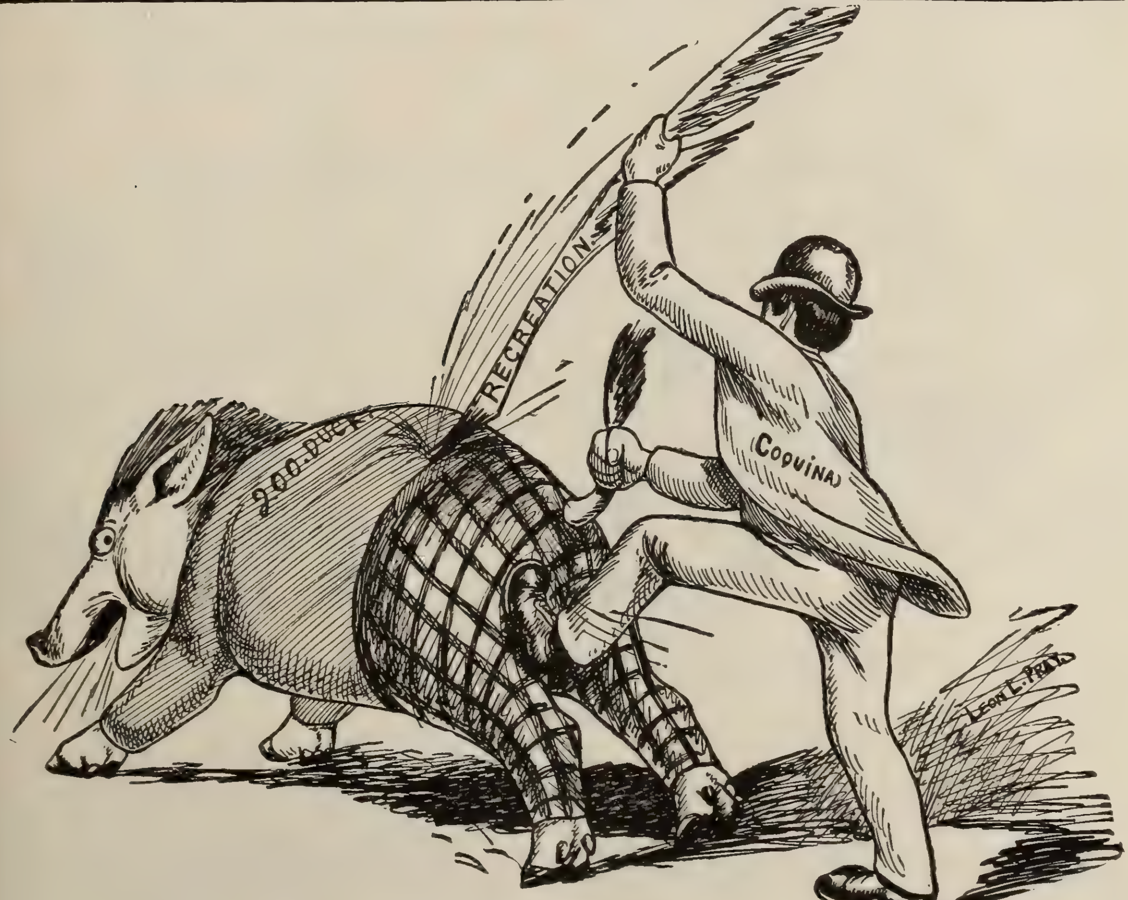
KNIT

DO YOU WANT A

Hand-knit Hunting Jacket
Cardigan Jacket or Sweater

Made to your order, any color or combination of colors you wish? Send five cents for illustrated catalogue in colors to

GEO. F. WEBBER, Station A, Detroit, Mich.



And RECREATION has got hold of him.

DO YOU NEED

A Can of Gun Oil

or a can of

Waterproofing Oil

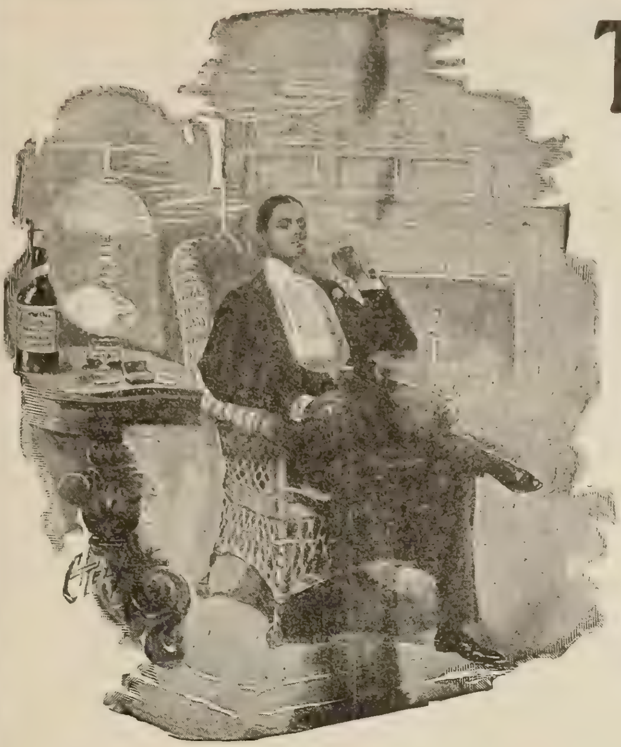
For your Hunting Boots or Shoes? If so, send me 2 yearly subscriptions to RECREATION and I will send you a

4 OUNCE CAN OF COLLAN-OIL

One of the best rust preventers and waterproofing materials ever invented. It has been on the market many years and thousands of barrels of it have been sold to leather makers, harness makers, boot and shoe makers, belt makers, gun makers and tool makers.

COLLAN-OIL is used extensively in the Army and Navy and in hundreds of large factories of this country.

It will take you but a few minutes to get 2 subscriptions and a can of COLLAN-OIL will last several months.

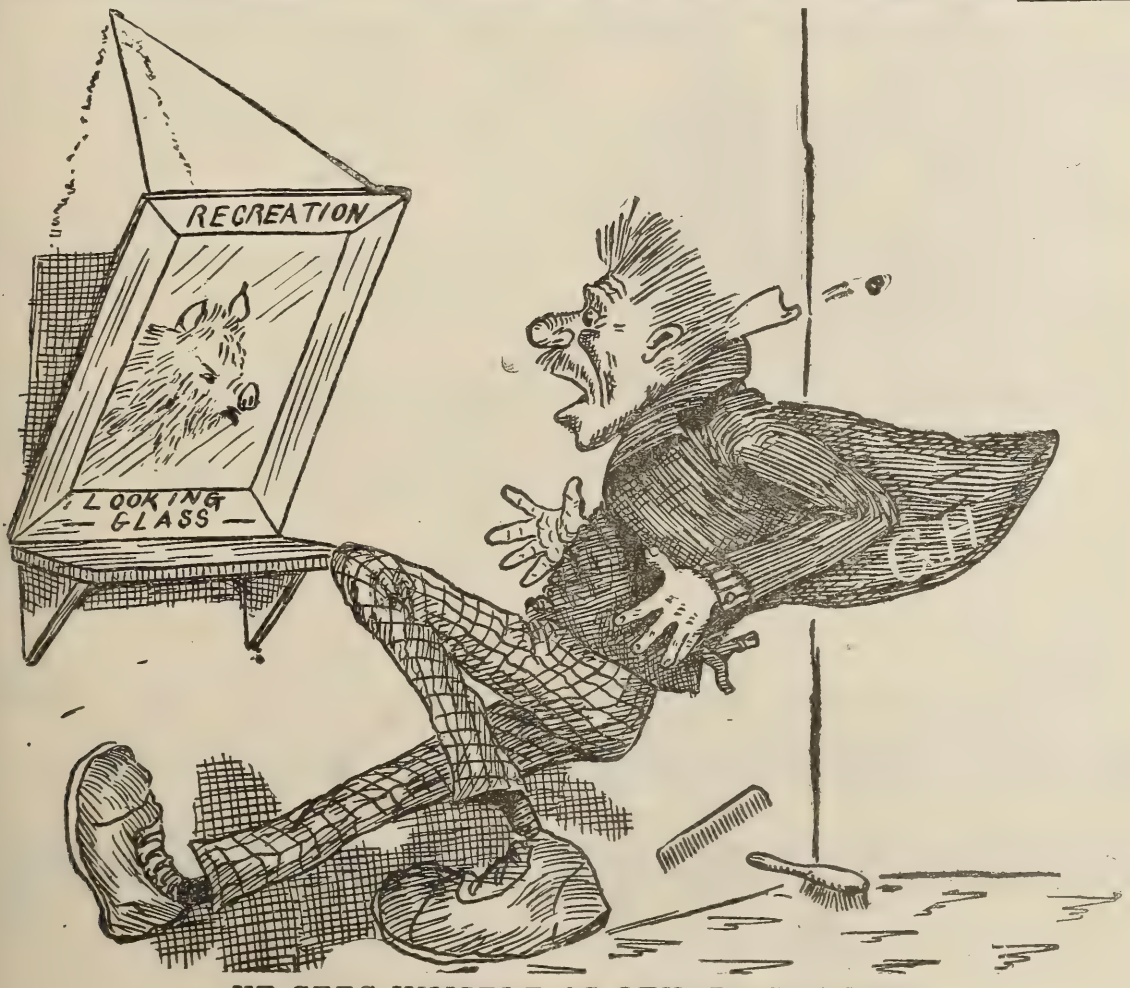


THE CLUB = COCKTAILS

Don't be prejudiced against bottled Cocktails until you have tried the Club brand. No better ingredients can be bought than those used in their mixing. The older they grow the better they are, and will keep perfect in any climate after being opened. You certainly appreciate an old bottle of Punch, Burgundy, Claret, Whiskey or Brandy, why should you not an old bottle of Cocktail? Have you considered it? Seven kinds. All grocers and druggists keep them.

G. F. HEUBLEIN & BRO., Sole Proprietors.

29 Broadway, New York, N. Y. Hartford, Conn. London.



HE SEES HIMSELF AS OTHERS SEE HIM.

THINKING OF

HOLIDAY PRESENTS?

Suppose you Send

RECREATION

During the Coming year

TO A LOT OF YOUR FRIENDS.

Nothing you could possibly give a man or a boy, interested in outdoor sports or in nature study, would afford him more pleasure than the monthly visits of this magazine. Many people have made a custom of sending **RECREATION** to certain of their friends every Christmas since 1894, and say the recipients prize it more than any other present they get.

Many of the presents people bestow on their friends at holiday time grow old within a week.

Recreation is always new, fresh and Interesting.

SATISFIED PEOPLE.

The Racine launch you sent me, for 300 subscriptions to RECREATION, arrived in good condition. It is a beautiful piece of workmanship, is easily operated, and perfect in every particular. Please accept my sincere thanks for this valuable premium, which through your generosity was so easily obtained. It is a pleasure to canvass with RECREATION, the best sportsmen's journal printed, as all lovers of outdoor sports are sure to subscribe, after looking over a sample copy.

J. W. Schreiber, Titusville, Pa.

The Harrington & Richardson gun you sent me as a premium for getting up a club for RECREATION has arrived O. K. I am pleased with its appearance, and if it shoots as well as it looks shall be delighted.

C. H. Beechgood,
Pastor M. E. Church, Oroville, Cal.

The Cyclone camera you sent me arrived in less than a week from the time I wrote you first. Your promptness in these matters should certainly bring you success. I am so greatly pleased with my gift that I can not find words to thank you.

Birdie Davis, Detroit, Mich.

The Stevens Ideal rifle you gave me for 10 subscriptions to RECREATION is a beauty and a hard shooter. I am greatly pleased with it, and thank you sincerely for it.

Wm. Wherry, Yeagertown, Pa.

The Horton rod arrived O. K. Accept my thanks for it and your promptness in shipping it. Would not exchange it for any other rod on the market.

W. D. Harr, Troy, O.

The cut-glass salad bowl and Marble pocket axe came to hand in good condition. Please accept thanks for such liberal premiums.

A. M. Day, Butte, Mont.

I received my tent and am delighted with it. Is a beauty, and is surely waterproof, for we tried the hose on it half an hour.

Geo. Dryden, Kansas City, Mo.

The Stevens pocket rifle you sent me as premium is a beauty. I have shot it at 300 yards with surprisingly good results.

F. J. Wing, Albany, N. Y.

The Marble pocket axe received yesterday. It is a beauty. I did not think it would be so nice.

Kark Fasold, Scranton, Pa.

BIRD MAGAZINE

Giving FINE ILLUSTRATIONS of all

BIRDS OF NORTH AMERICA

The January number contains illustrations from life of California Partridge, Texas Bob-white, Scaled Partridge, Wilson's Thrush and Chickadee; also many other fine illustrations of our birds, including colored plate of Long-billed Curlew.

Monthly.
$1.00 A YEAR.
Single Copies 10 cents.
Mention RECREATION and send for a copy.

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SWEET PEAS

Double Sweet Peas—White, Pink, Scarlet, Striped. The 4 sorts for 15c.
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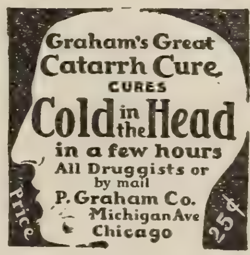
All 12 sorts, one packet each for 20c., postpaid.
OUR GREAT CATALOGUE of Flower and Vegetable Seeds, Bulbs, Plants and Rare New Fruits, 136 pages, profusely illustrated, large colored plates, FREE.
JOHN LEWIS CHILDS, Floral Park, N. Y.

"Hello! Where are you going?" cried the lion, as the fleet-footed stag dashed by him.

"Oh! I'm just traveling for my health," panted the stag; "why do you ask?"

"My friend, the tiger, invited me to participate in a stag dinner party to-day, and I was wondering if you were the party."—Philadelphia Press.



For Catarrh 99% Cures Guaranteed

We want to suggest to you that you will not likely escape at least one severe cold this winter. If you have our remedy *on hand* the cold will hardly have a chance to develop. Get it to-day of us by mail.

1263 Mich. Ave., Chicago, Ill.

SOME RARE OPPORTUNITIES

These goods are all new, and will be shipped direct from factory. Prices named are those at which manufacturers and dealers usually sell. Here is a good chance to get

A Book, a Gun, a Camera
A Sleeping Bag, a Fishing Rod
A Reel, a Tent, a Bicycle
} FREE OF COST

Subscriptions need not all be sent at once. They may be sent in instalments as taken and credit will be given on account. When the required number is obtained the premium earned will be shipped.

TO ANY PERSON SENDING ME

TWO yearly subscriptions to RECREATION at $1 each, I will send a copy of *Hunting in the Great West*, cloth; or a Zar Camera, listed at $1; or an Ingersoll Watch or Cyclometer, each listed at $1; or a Recreation Waterproof Match Box, made by W. L. Marble and listed at $1; or a Shakespeare Revolution Bait listed at 75 cts.; or 2 dozen Lovell Dry Plates, 5x8 or smaller; or a Laughlin Fountain Pen; or a Cartridge Belt listed at $2; or a dozen Chatfield Trout Flies, assorted, listed at $1; or a Snap Shot Album, holding 400 4x5 views, and made by the Buechner Mfg. Co.

THREE subscriptions at $1 each, a copy of *The Battle of the Big Hole*, cloth; or a safety pocket ax, made by W. L. Marble and listed at $2.50.; or a Post Fountain Pen; or a dozen Chatfield Bass Flies assorted, listed at $2; or 4 dozen Carbutt plates, 4x5 or 5x7.

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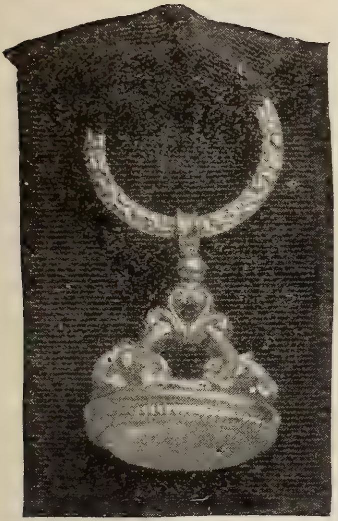

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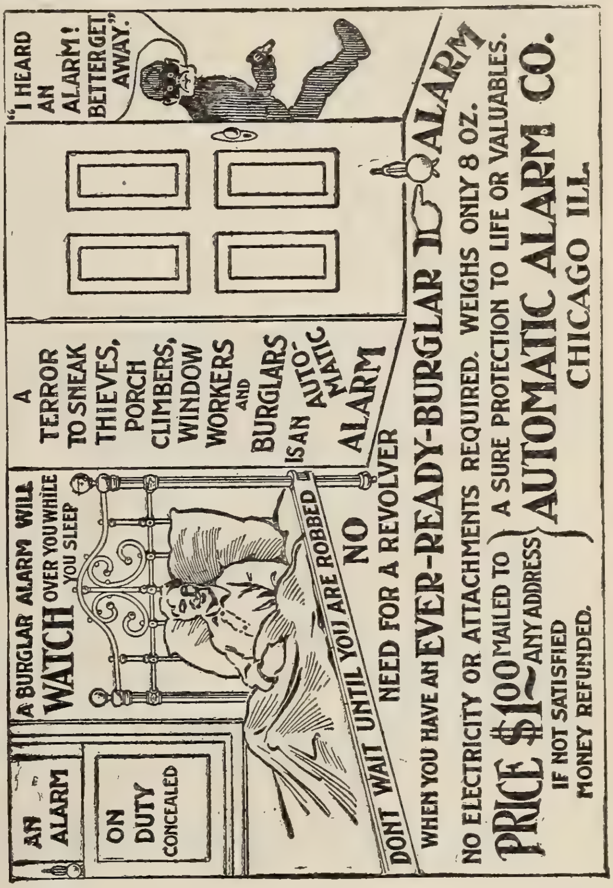
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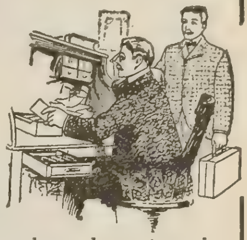

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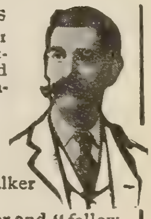

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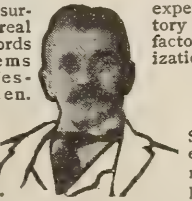

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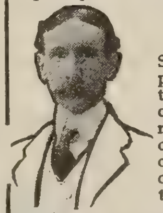

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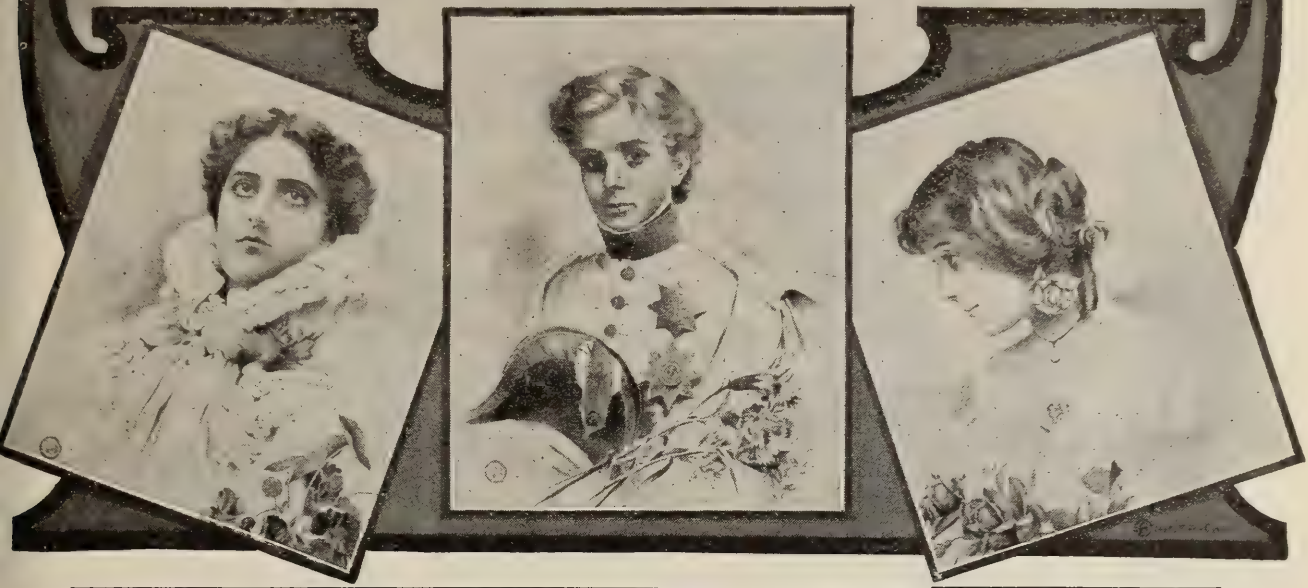

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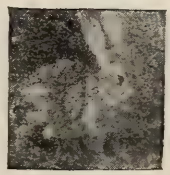

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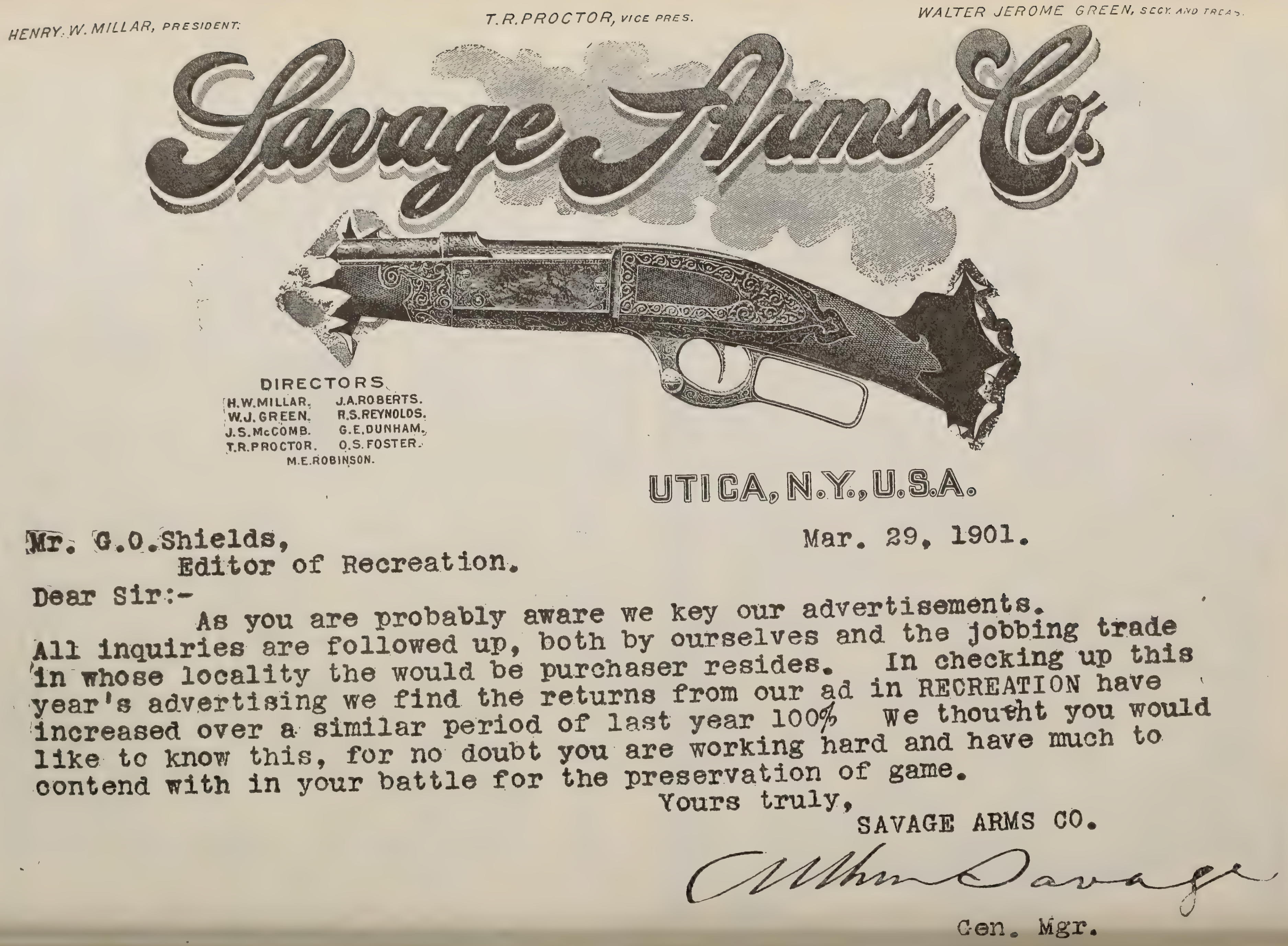

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Mar. 29, 1901.

Mr. G. O. Shields,
Editor of Recreation.

Dear Sir:-

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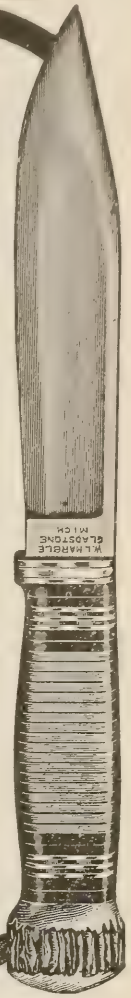

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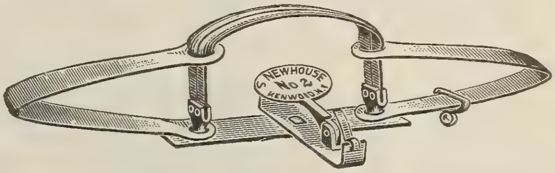

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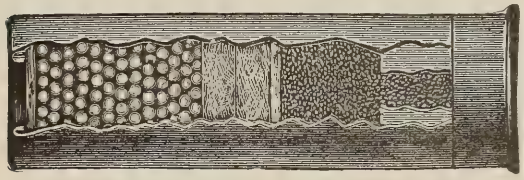

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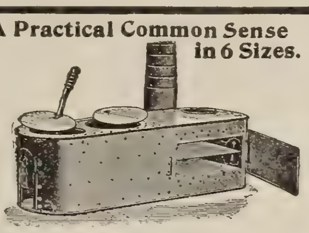

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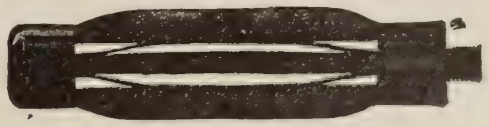

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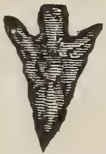

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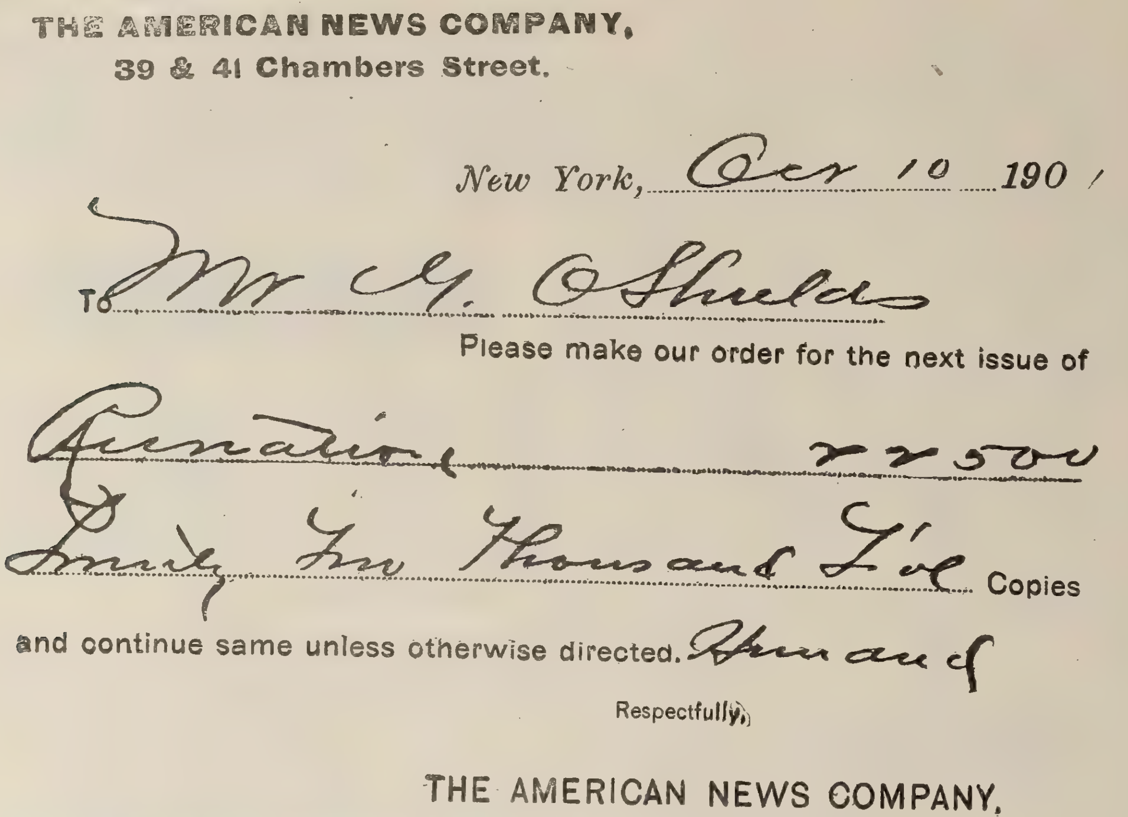

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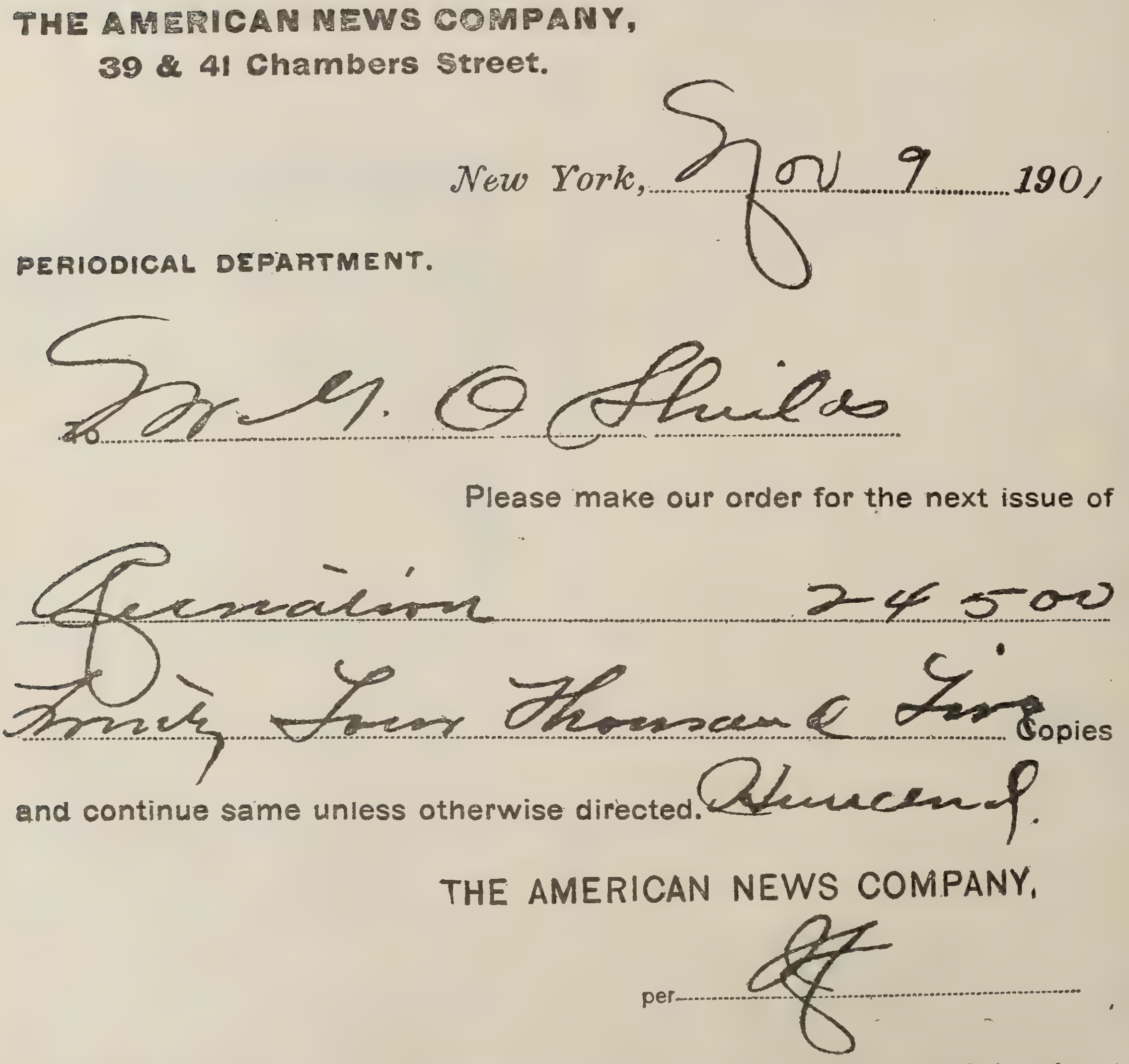

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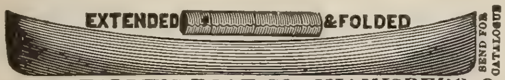

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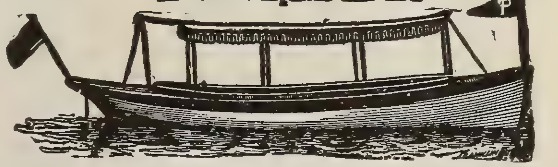
I congratulate Sheriff McMahon and Warden Higgins most heartily on their excellent work in this case, and trust the courts before whom their prisoners shall be arraigned will sustain the officers and give the lawbreakers a dose of justice that will last them the rest of their lives.—Editor.

PALMER



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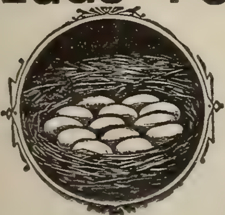

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Act No. 67 requires non-resident gunners to secure a license before hunting in Pennsylvania. This bill is not a Game Commission measure, and is of the kind that appears unjust to many persons. Especially does this law appear unjust when we consider that while the State owns the game, the farms of the State are individual property, and a State license gives no right to enter upon any of those farms without permission of the owner. A person possessing a license under this act might still be prevented from shooting in this State. One of the bills recently signed by the Governor forbids hunting on posted, cultivated land without the consent of the owner, under a penalty of $5 and costs, or, in default thereof, of imprisonment. So this license in reality gives no authority to hunt or shoot in this State. Yet by the farmers with whom it originated it was considered a necessity, as a protection against the inroads of shooters, who, as soon as the season opens, swarm from the cities and towns across the border. They shoot everything in sight, open gates, tear down fences, start fires and commit many other depredations. Then they slip across the border into their own State, secure in the knowledge that they are unknown and unreachable. Under the license law non-resident gunners will soon learn that they are liable to arrest and punishment immediately on beginning to hunt in this State unless they possess a license. Any constable or game warden can arrest without warrant non-resident hunters who are unable to show a license when it is demanded. Moreover, the record which is kept of licenses issued will aid in the arrest and punishment of such licensees as fail to conduct themselves as sportsmen.

Bill No. 173 is the only law drafted and supported by the Game Commission that reached the Governor. We look on it as a great stride in the right direction, and expect it will greatly aid in the enforcement of the law. The Game Commission of Pennsylvania and the Fish Commission are entirely distinct bodies. Letters of inquiry relative to fish should be directed to the Fish Commission; letters on game subjects to the Game Commission.

Joseph Kalbfus,
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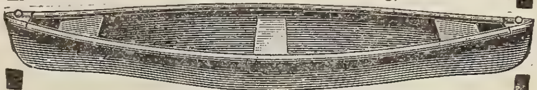

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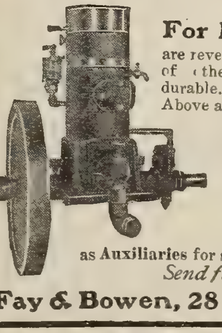

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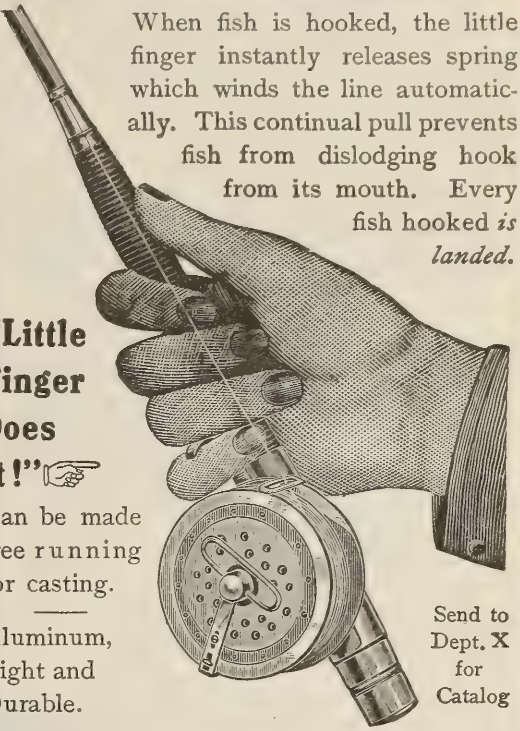

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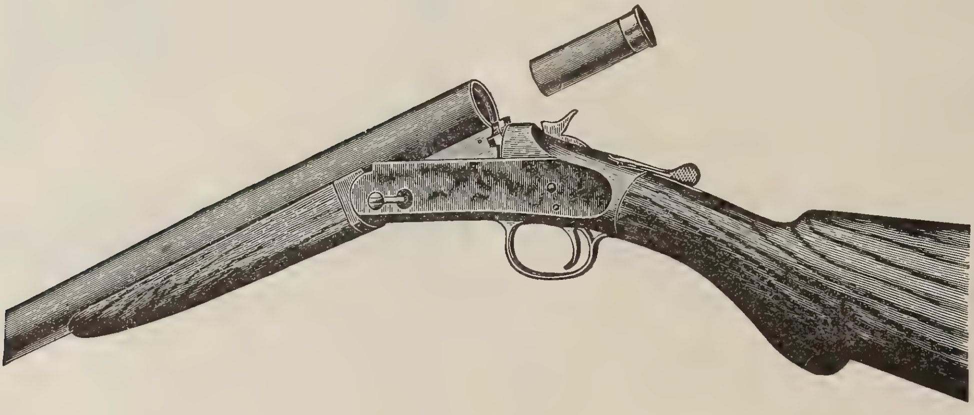

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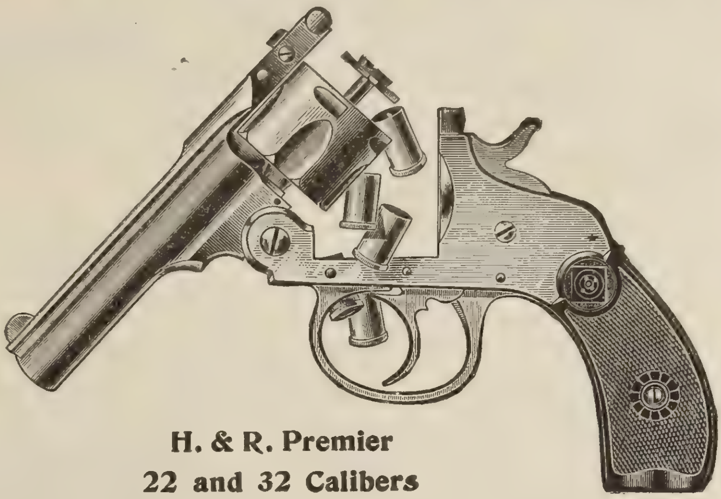

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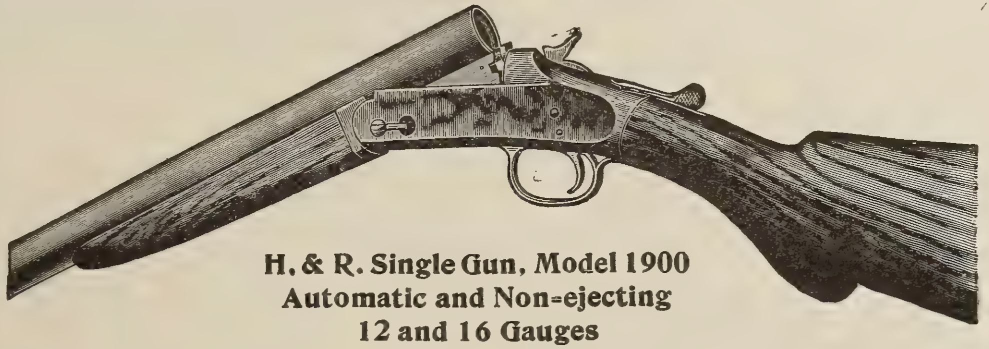

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W. A. Nyce, Jr., Poughkeepsie, N. Y.

If all your advertisers are as reliable as Drs. H. R. Phillips and Wrean, Penn Yan, N. Y., you have a good clientage. I bought a trio of Belgian hares of them, and they sent me dandies.

Geo. Scott, Brooklyn, N. Y.

The Shakespeare reel for 15 subscriptions at hand. Accept my sincere thanks. Have tried it a number of times and find it as advertised—one of the best casting reels made.

S. C. Morgan, Waukesha, Wis.

Please accept my thanks for premiums sent me; namely, hunting coat, Carpenter folding cot, and Bristol steel rod. They are 3 of a kind and a mighty good kind.

M. Cook, Barre, Vt.

The Korona camera you sent me as premium for a club of subscribers to Recreation is a fine instrument in every particular, exceeding my expectation.

S. Smedley, Media, Pa.

The Gall & Lembke field glass sent as premium for Recreation subscriptions was received in good condition. Am much pleased with it.

J. C. Smith, Lynn, Mass.

I received the Yawman & Erbe automatic reel in return for subscriptions I sent in. It works to perfection and I am greatly pleased with it.

C. A. Massey, Malone, N. Y.

My Savage .303 that you ordered for me arrived O. K. It is exactly as I ordered, and is certainly a fine premium for so little work.

H. N., Uhrichsville, O.

I received the Nehring convertible ampliscopes you sent me as premium for 5 yearly subscriptions and am well pleased with them.

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Chas. Lenhardt, Utica, N. Y.

I received the Marble pocket axe you sent me. It is a handsome tool and one that will do good service.

L. L. Litman, Dunbar, Pa.

The Shattuck gun you gave me for the 30 names I sent you was received O. K. and is better than I expected.

W. T. Foster, Joplin, Mo.

I thank you for the Primus oil stove you sent me as a premium. It is worth its weight in gold.

John Snipes, Plainfield, Ind.

Wizard A camera is at hand. I thank you for it and think myself well paid for the few hours spent in getting up the club.

R. C. Ditto, Delphos, O.

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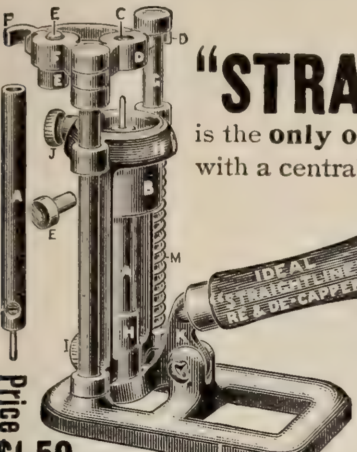
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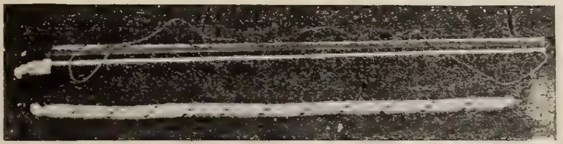

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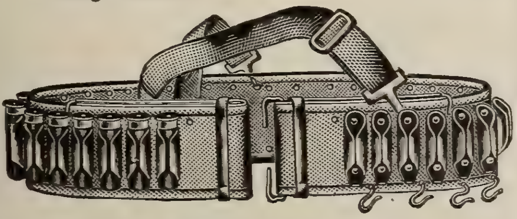

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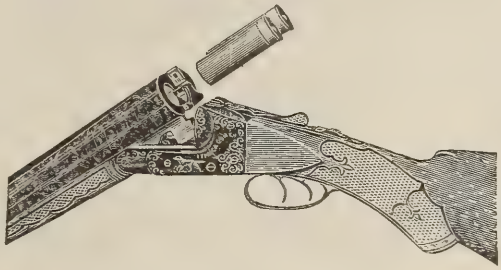

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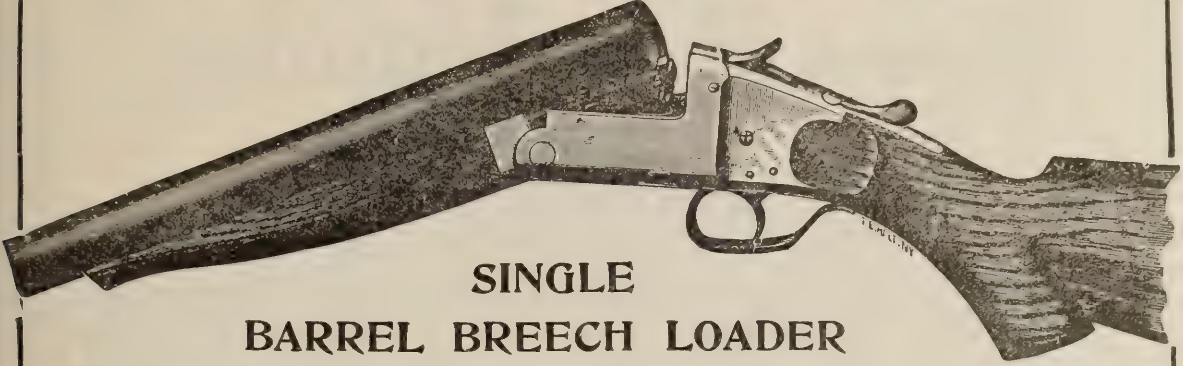

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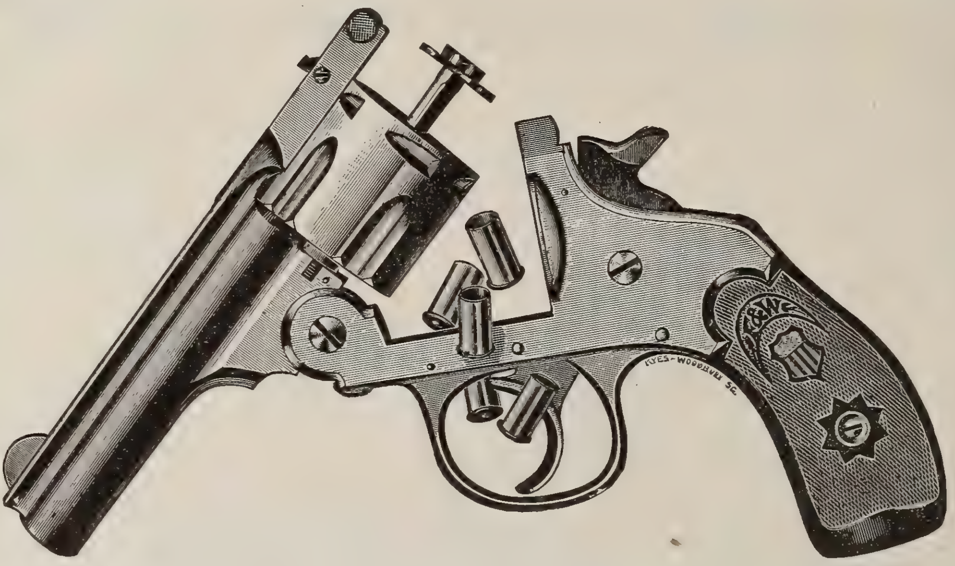
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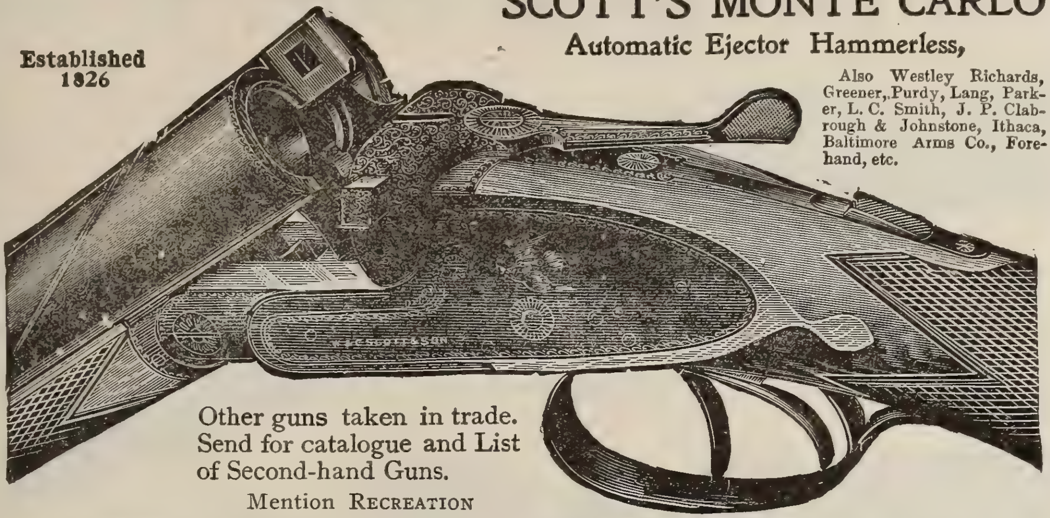

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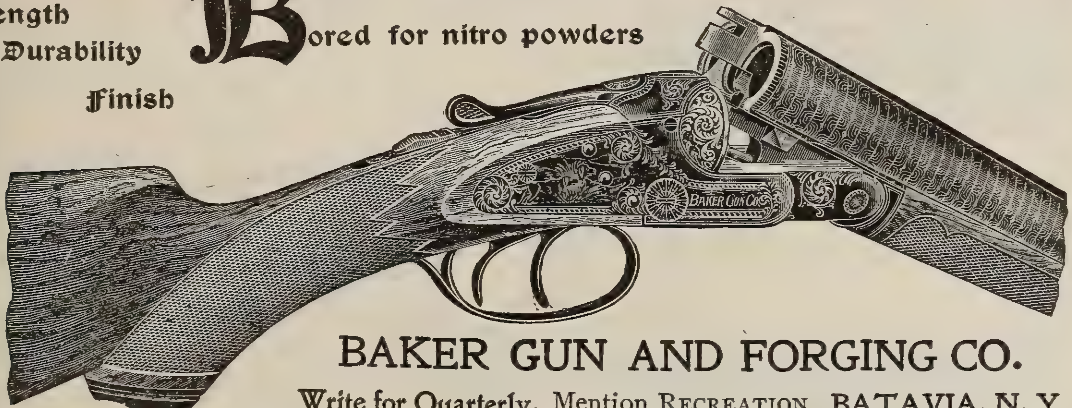
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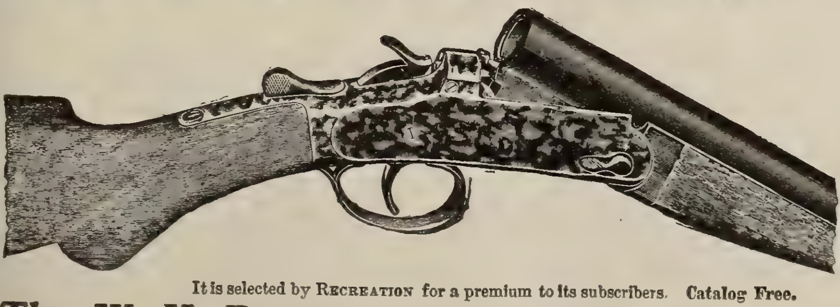

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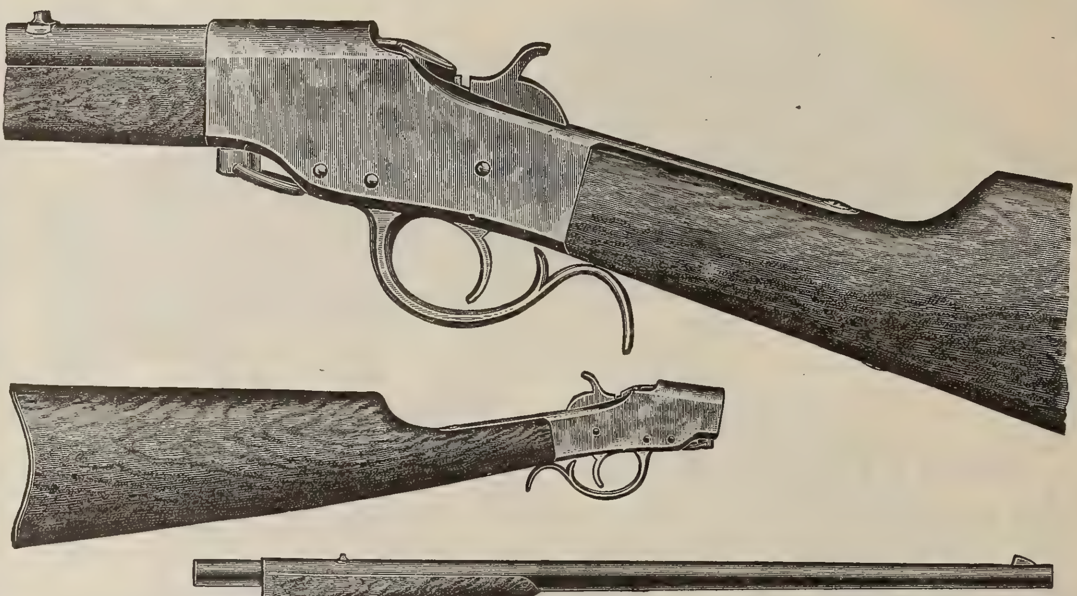

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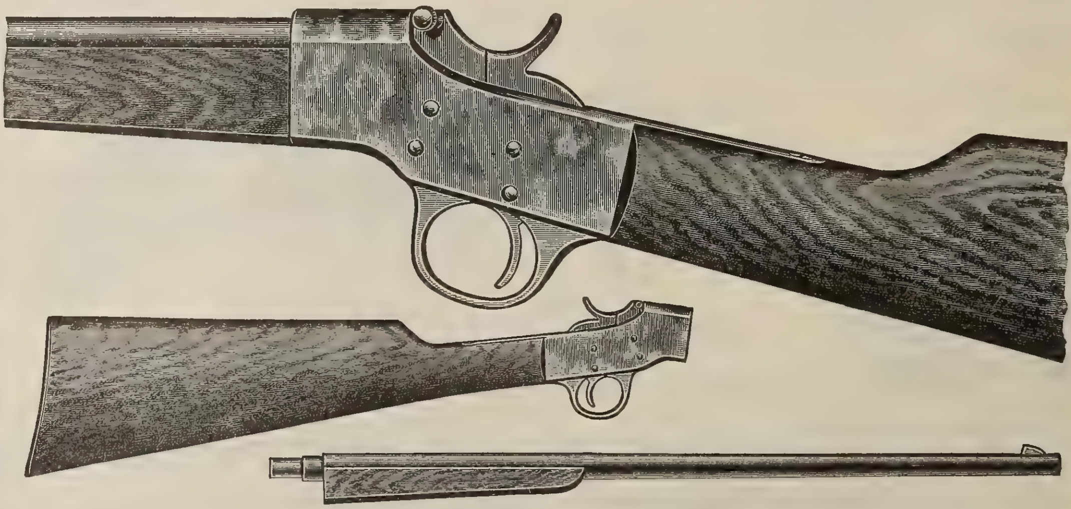

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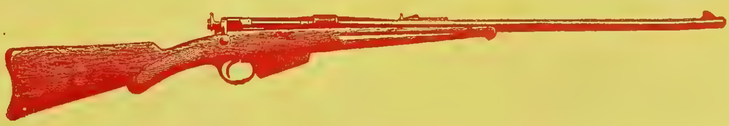

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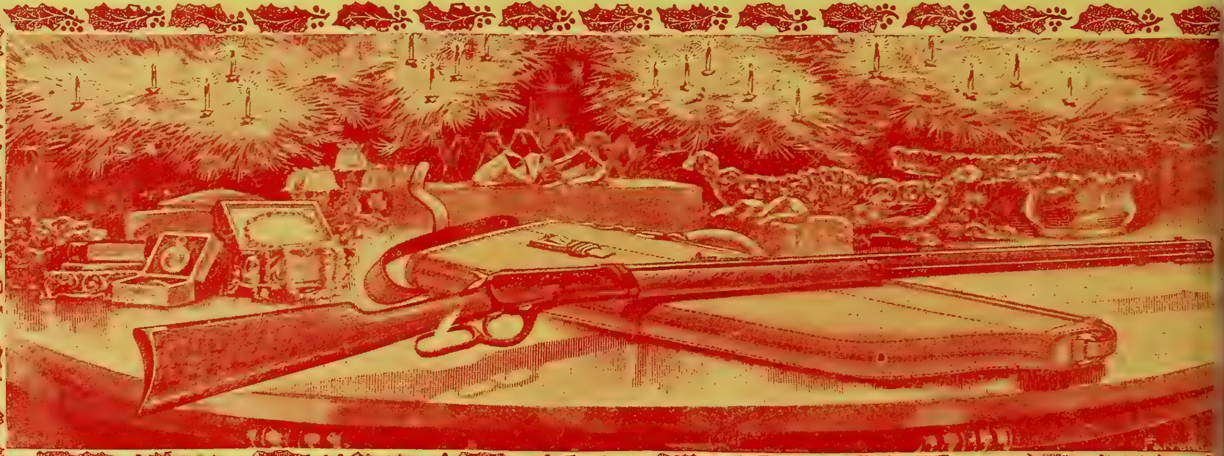

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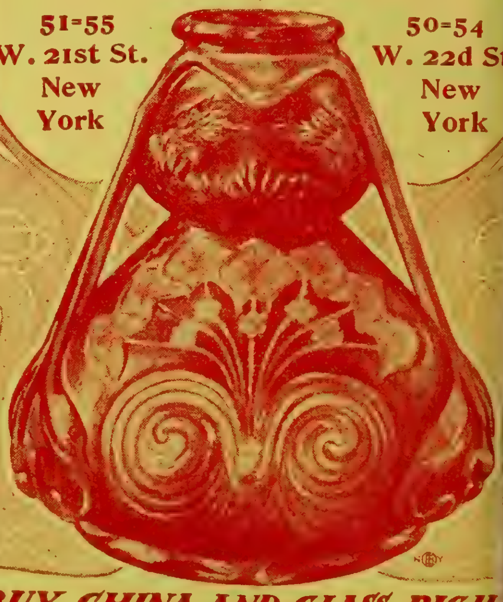

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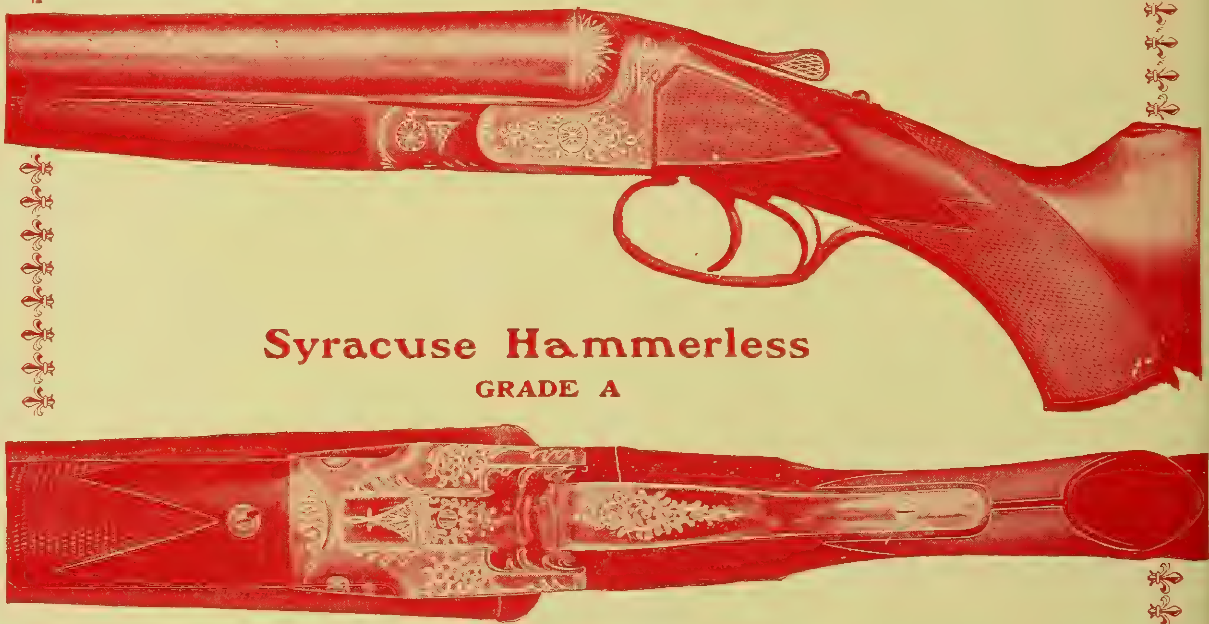

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CONTENTS OF THIS NUMBER

PAGE
Slewfoot Arose in Front of Us and Stood Like a Statue .... Frontispiece.
My First Experience on Snowshoes. Illustrated .... W. L. Graves. 85
Col. Taurus. Illustrated by Frontispiece .... J. W. Brady. 89
Hunting for a Place to Hunt. Illustrated .... H. H. Todd. 93
The Farmer's Petition. Poem .... A. L. Vermilya. 98
Hunting in the Baker Range .... T. C. Austin. 99
An Uninvited Guest. Illustrated .... Stanley Waterloo 103
My First Camping Trip .... Rev. J. H. Fuller. 106
On Forbidden Ground .... J. Wills 109
A Deer Retrieving Dog. Illustrated .... E. B. Collins. 111
On the Trail of the Four-Footed Locust .... Henry Howard Rose. 112
Is There an Ibex in this Country? 114
Boil It Down. Poem Reprinted .... Joe Lincoln. 114
From the Game Fields 115
Fish and Fishing 124
Guns and Ammunition 127
Natural History 135
The League of American Sportsmen 141
Forestry 145
Pure and Impure Food 148
Editor's Corner 151
What Inki Thinks 152
Publisher's Notes 154
Amateur Photography 159

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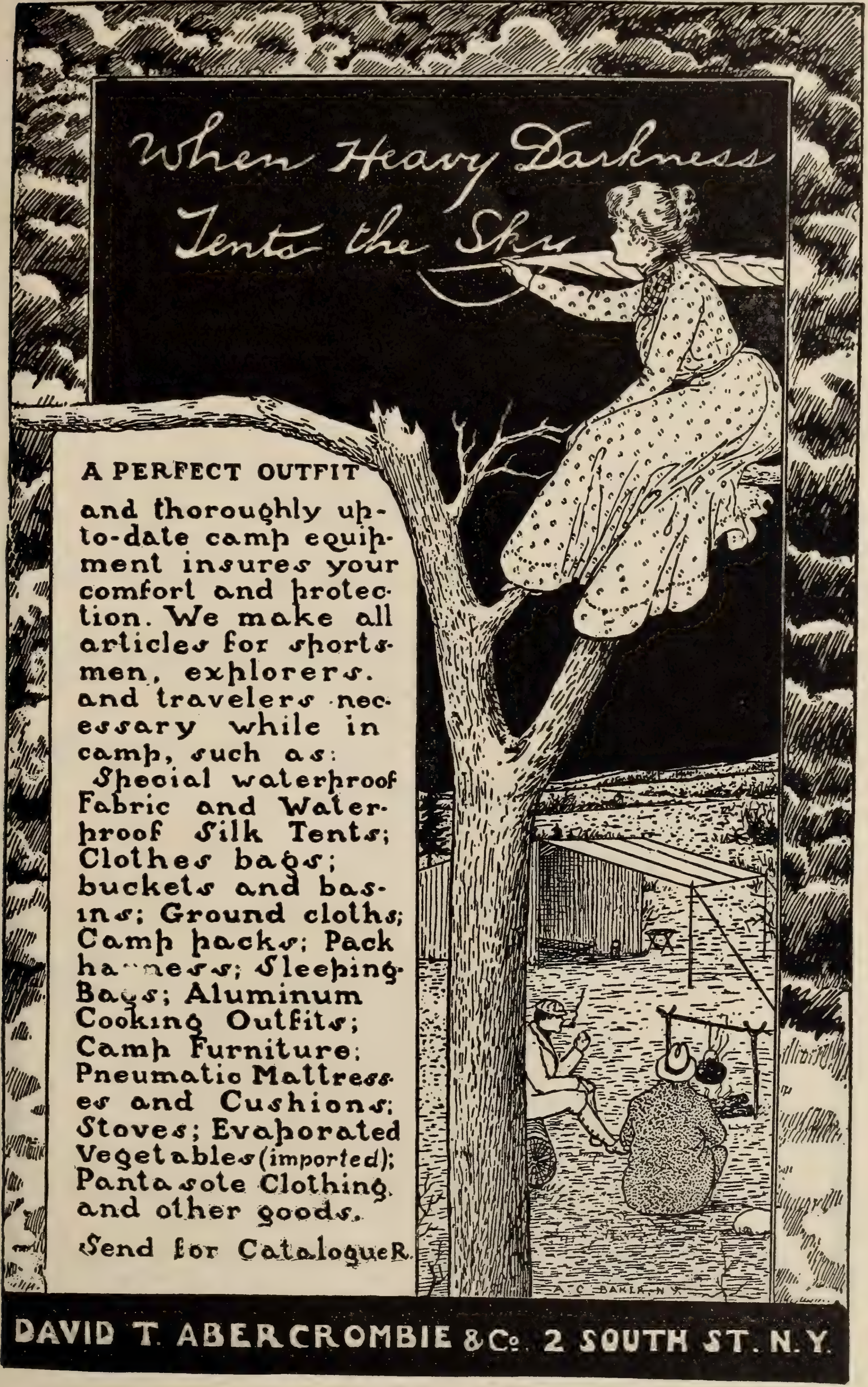
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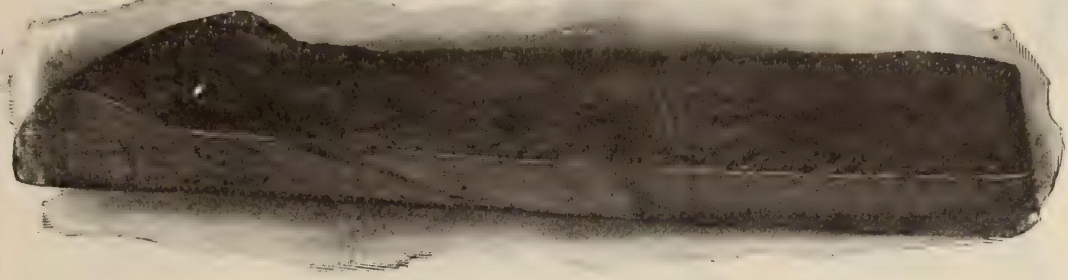

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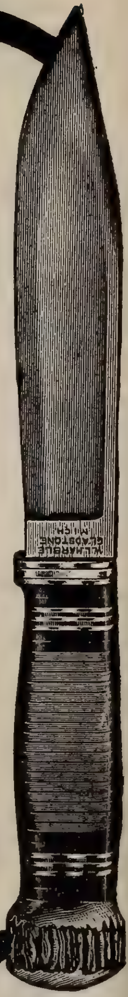
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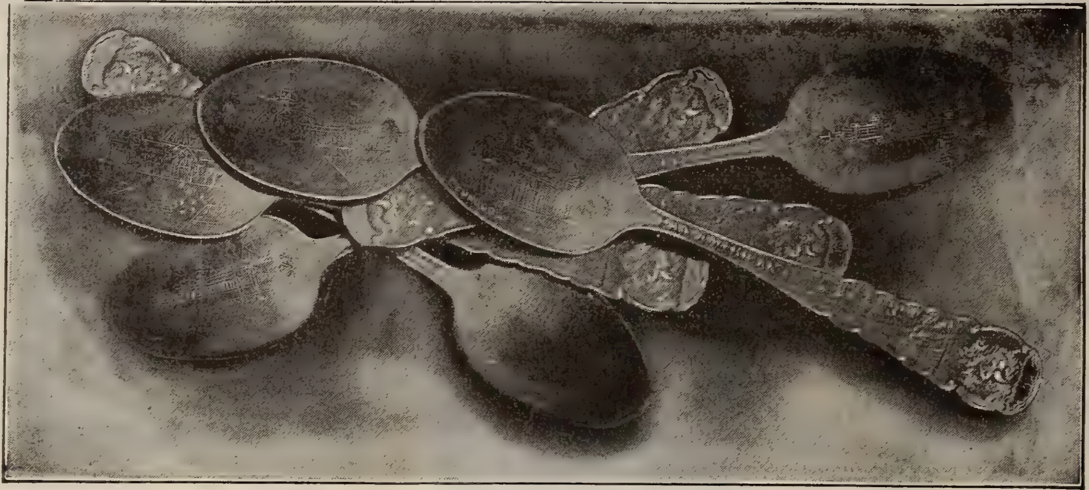

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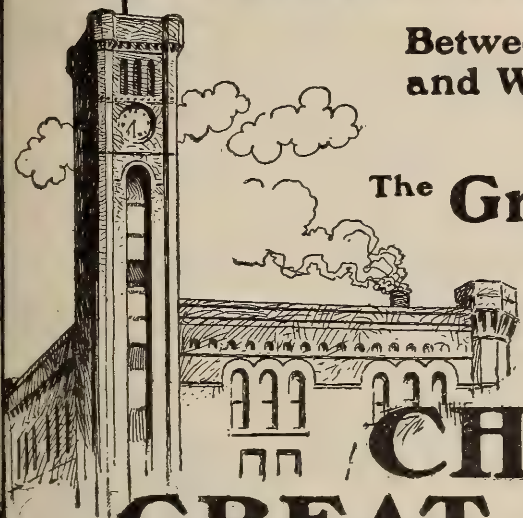

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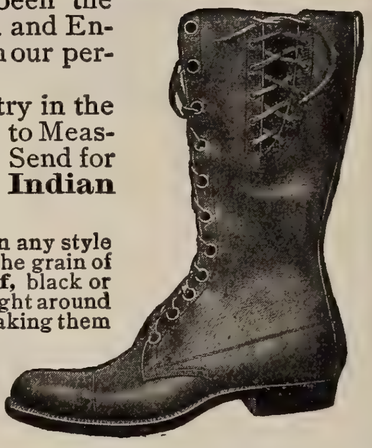

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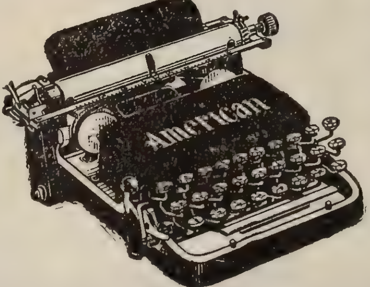

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of all such of your friends as are sportsmen, in order that I may send them

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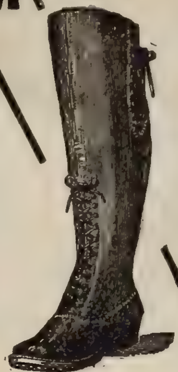

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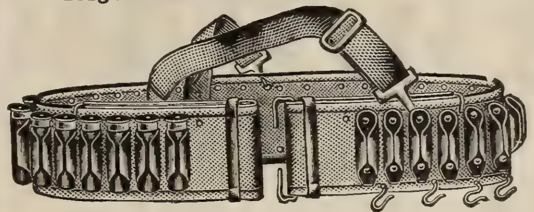

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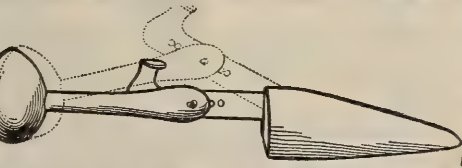

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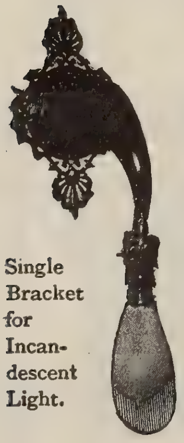

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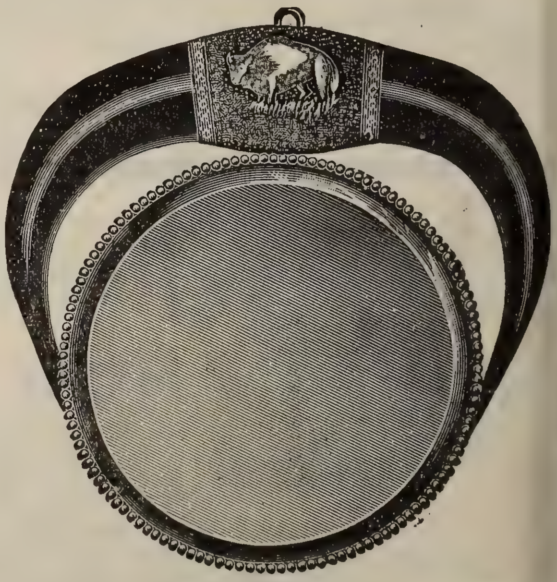

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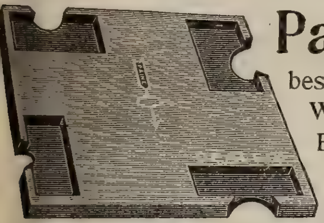

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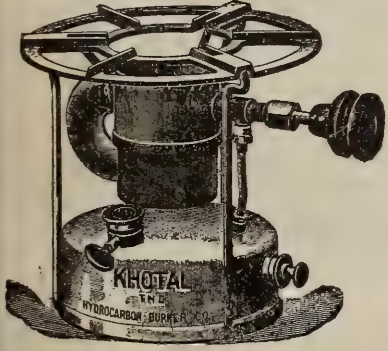

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The "Khotal" costs little to buy and little to run. The combustion is perfect; no smoke, no smell, no soot deposit on pots and pans.

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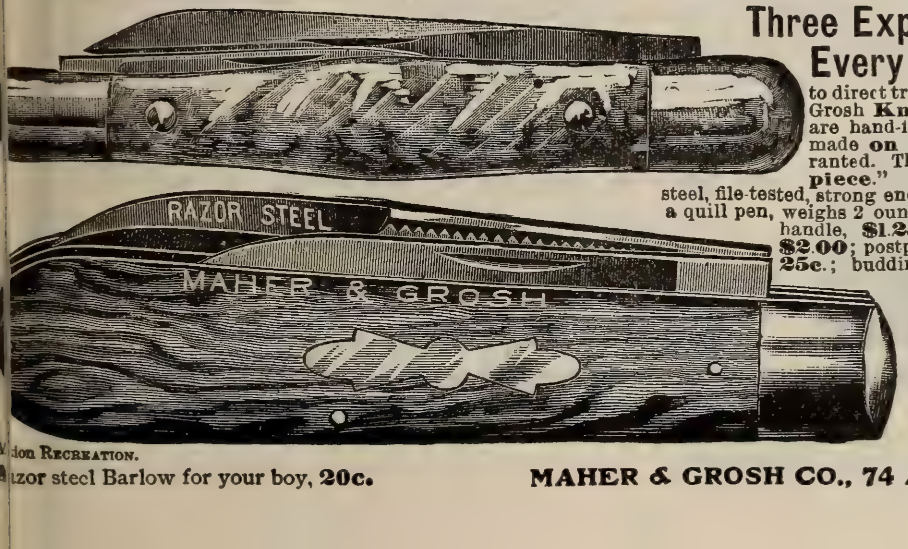

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Send for 80-page Free List and "How to Use a Razor." Be Kindly; Write Us.

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STYLE 29
Concert Grand Upright
No other piano made equals this in style and design of case.

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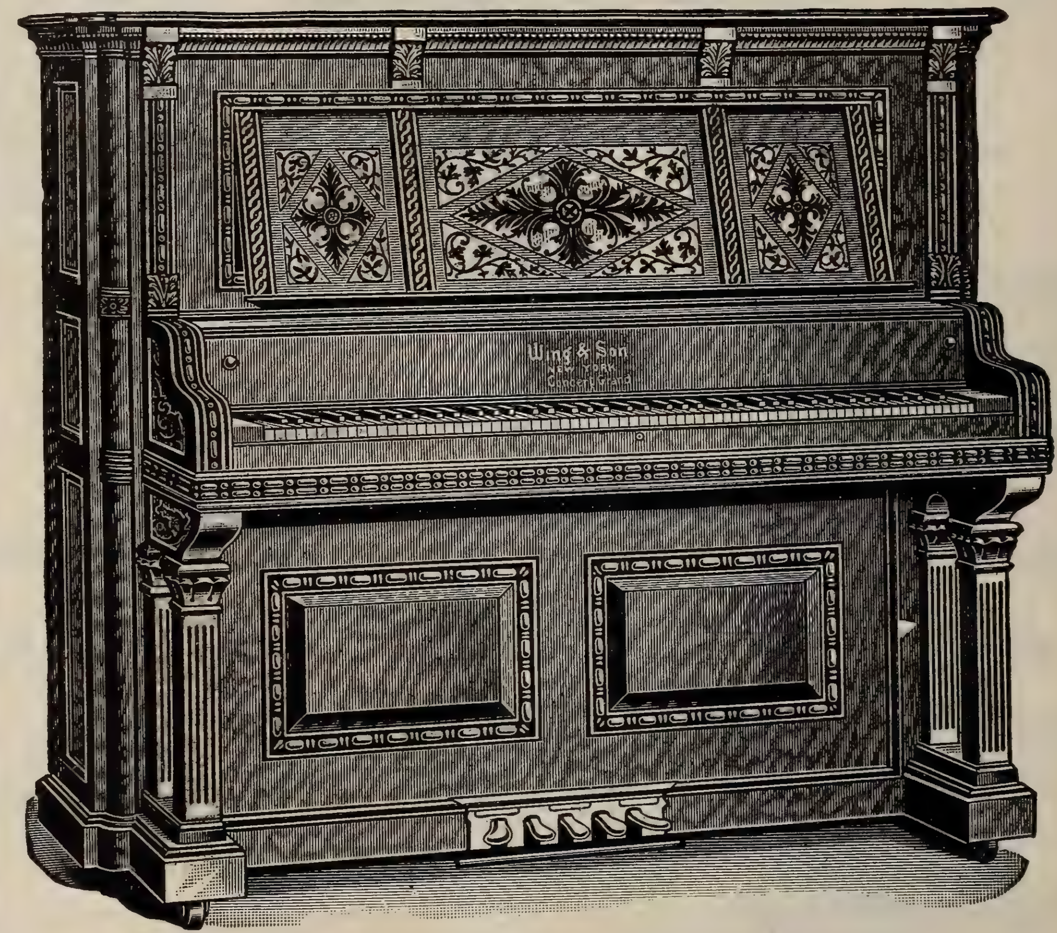
No matter how far away you live, our improved system of doing business makes **it actually more** convenient and more satisfactory to buy a piano from us than to buy one from a local dealer **in your own** town or city. Write us and receive full particulars.

We sell the Wing Piano on easy terms of payments and take old **instruments in exchange.**



We aim to make the best piano possible and to sell it at the lowest price possible. If you wish to buy a fine piano at a low price, write us.

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1868—34th Year—1902.

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We will send any of the above pieces, or any other 50c. piece published, for 17c., or 6 for $1, POSTPAID.

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"STRONGEST IN THE WORLD"

J.W.ALEXANDER
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VICE PRESIDENT

James Smith, who was at one time a well-known and substantial citizen of this county, died yesterday at the County Infirmary of diseases incident to old age.

Items such as the above can be seen in the papers almost daily. Yet many such men in their prosperous times could well have afforded an Endowment Policy, which not only protects the family if the assured dies, but also helps to provide for his own old age if he lives.

For cost of an Endowment at your age cut out and mail coupon below.

THE EQUITABLE SOCIETY, Dept. No. 16.
120 Broadway, New York.

Please send me information regarding an Endowment for $.............if issued to a man......years of age.

Name..............................

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A partner in our business selects our materials; another has charge of the brewing. The men who built the reputation of Schlitz Beer, personally protect it. The owners of the business see that all Schlitz Beer is pure.

POOR BEER

Means poor materials, for there's a chance for great saving there.

Cleanliness isn't expected in it, so there's economy there.

Purity isn't even claimed.

And when age isn't made essential, you get a green beer—a beer that ferments on your stomach, causing biliousness.

PURE BEER

Must be brewed in absolute cleanliness, and cooled in filtered air.

It must be aged for months in refrigerating rooms, then filtered, then sterilized after it is bottled and sealed.

That doubles the cost of the brewing, and none but the best materials are ever treated in that expensive way.

One beer costs you about the same as another.

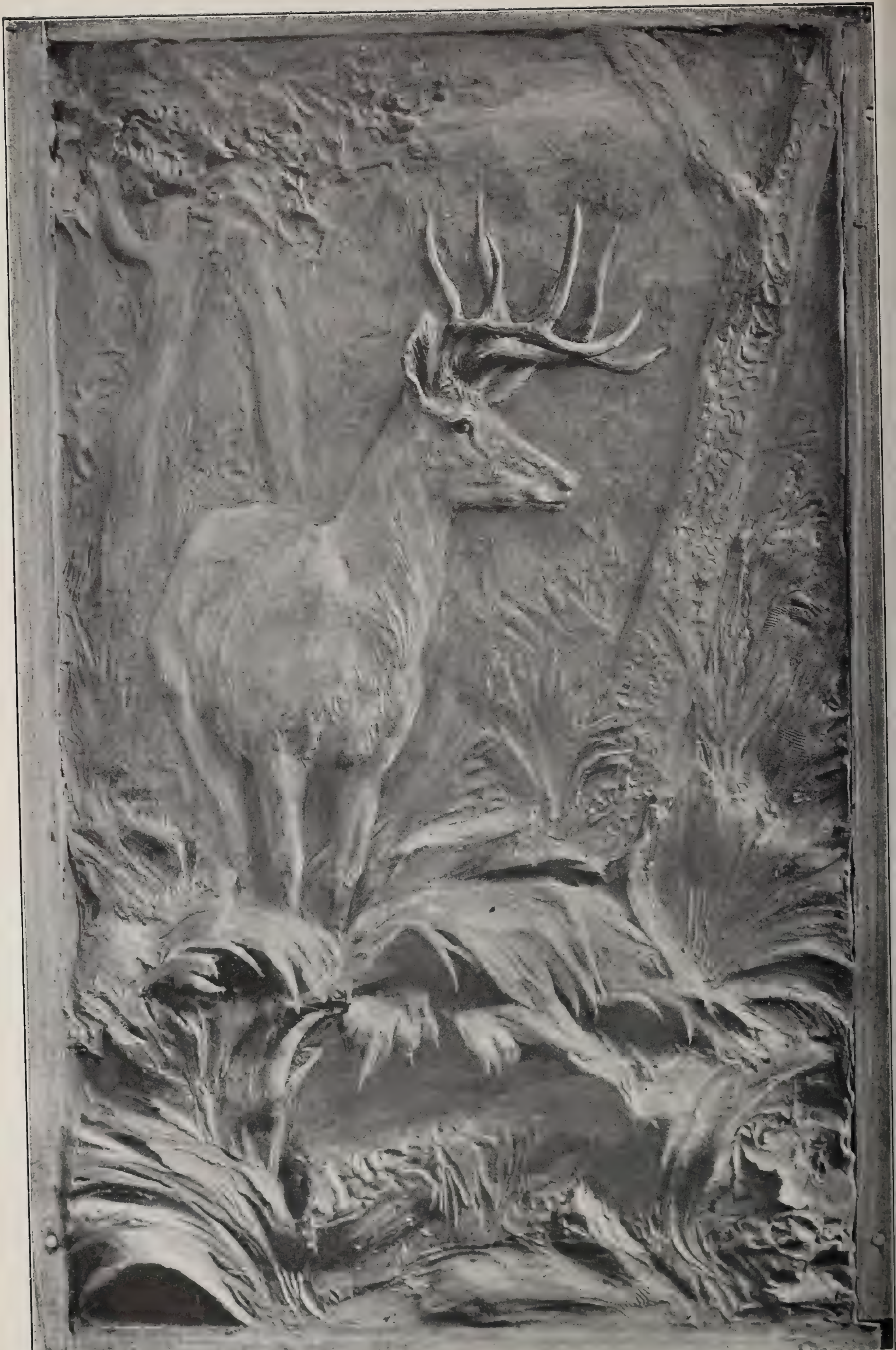
Not so with your dealer. He pays most for the pure beer. He makes most on a poor beer.

It lies with you to get Schlitz, The Beer that made MilwaukeFamous

Schlitz

J. L. STACK

Ask for the Brewery Bottling.



SLEWFOOT AROSE IN FRONT OF US AND STOOD LIKE A STATUE.
(See page 90.)

RECREATION

Volume XVI. FEBRUARY, 1902. Number 2.

G. O. SHIELDS (COQUINA), Editor and Manager.

MY FIRST EXPERIENCE ON SNOWSHOES.

W. L. GRAVES.

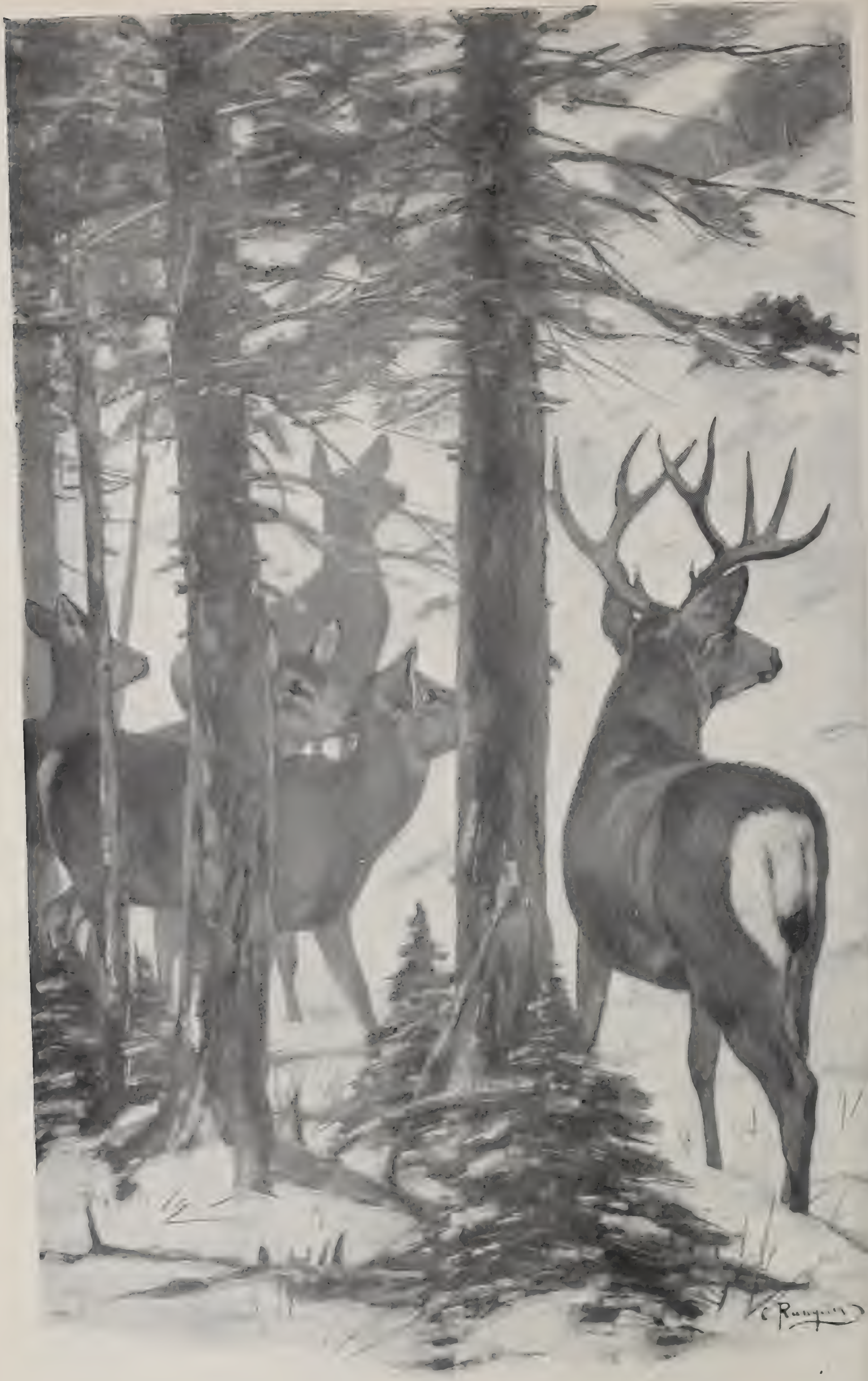
It looks easy to do, and, in fact, it is, after you know how; but it takes practice to go well on snowshoes, or *skis,* as we called them. My first experience was in Western Idaho in the winter of 1892. I was there on a visit to my brother, and being ardent sportsmen, we longed for a heavy fall of snow, so we could try our luck with blacktail deer. Thanksgiving morning we awoke to find 12 inches had fallen during the night, and it was still coming down in great flakes.

"Now for our hunt," said my brother. We put in most of the day getting ready. We had to go 10 miles in a boat and then pack everything on our backs 5 miles farther. Slush ice was running in the river, but it did not trouble us. We made the run down the river in 2 hours, tied our boat, and shouldered our packs. My brother had web snowshoes and got along very well, but I had none, expecting to use a pair of *skis* he had up at the cabin. I traveled a long 5 miles that day. The fall of snow had increased until it was over 2 feet deep, and my pack, which weighed 60 pounds when I left the boat, weighed 200 when we reached camp. When we got straightened out and had a bit of supper, I promptly turned in, for I was tired.

We were up early next morning and ready to start at sunrise. I put on the *skis.* They were good ones, well seasoned and light. I had received instructions from my brother how to use them. He slipped them on and made a little run around the camp to show me how to do it. We had our plans mapped out for each day's hunt. The first day we were to work West of camp. I was to go over the mountain while he was to go around, and we were to meet at the farther side. Anyone familiar with *skis* knows how hard it is for even a good snowshoer to climb a mountain, but I persevered, and after 2 hours of slipping and falling I stood on the crest.

While resting and getting my bearings, I heard rapid firing to the Southwest and I knew my brother had started a bunch of deer. I knew, too, that we should have venison for supper, as he seldom missed a shot. My surmises were correct. He stopped 3 deer before they got out of reach.

"Now," thought I, "if I want a hand in this business I must be moving." I knew the runway was around the foot of the mountain, and if I could get to it in time I should have a shot. There was a slight decline at first from the crest, free from brush, trees and rocks. I went down it like a race horse, but about half way down it suddenly grew steeper. I flew. No railroad train ever went so fast. I was scared, for down below me, near the foot of the mountain, I could see brush and trees. I knew that if I should run into a tree at the rate I was going there would not be enough of me left to hold an



I CAME OUT IN FULL VIEW OF ABOUT 20 MULE DEER.

inquest over. I had my guide pole, and I had been told that one must sit astride the pole to take the weight off his *skis.* I proceeded to put these instructions to the test. I began to slow up, but I ran over a big boulder, and when the guide pole slipped off, it threw me out of balance and started me on another course, while the snowshoes kept straight ahead. Of course we parted company. I went rolling and sliding down through the snow in every conceivable position, lost my gun and hat, and finally brought up in a small clump of brush about 100 yards from where I started to fall, but with no bones broken and only one or 2 little patches of hide gone from my face. I straightened up as quickly as I could, picked up my hat, and began a search for my gun, which had fallen quite a distance from the line of my glide. I dug down in the snow and soon brought it to light; then started on down toward the runway. It was not so easy, as I had not hunted up my *skis*, which had lodged in a clump of small brush a quarter of a mile away. I made fair time, however, and on turning a point of brush I came out in full view of about 20 mule deer. I determined to try a shot. Selecting a large buck, I fired, and had the satisfaction of seeing him fall. I went on down, dressed him and then hunted up my *skis.* Returning to my deer, I started around the trail, dragging him. I soon met my brother, who took hold with me, and we went back to where he had left his 3. We hung them all in a tree, out of reach of wolves, and went to camp, well pleased with our morning's work. After dinner we brought in our game on a toboggan.

Next morning we skirted a small lake, going East. I had the web shoes and my brother wore the *skis;* but I got into trouble again. As I was crossing a ravine, I caught the toe of one web under a willow which had been bent over with the weight of snow. I turned a flipflop, or tried to, but my web hung on to the willow. Unlike the *skis*, which are loose on the feet, the web was tied hard and fast; so there I hung. After much squirming and twisting, I managed to get loose. Of course my gun was lost again, and I had an hour's search in the willows before I found it.

That day we got 2 deer, and the next day 2. My brother said that would make him enough meat for the winter. He liked to kill his meat just after the first fall of snow, as it was then in better condition than at a later time.

We made another toboggan and on the 2 we took all our deer to the river, loaded them in the boat and started for home. Then our work commenced, for the ice, which had been slush before, was in large cakes and frequently bumped against us, taking us back down the river at each bump; but by hard work we finally reached home.

I afterward became expert on both *skis* and webs, but I never forgot my first experience with them.

"This is a world of sorrow,"
"A shadowy vale of woe,"
And such frequent declarations
Are what help to make it so.
—Washington Star.

AMATEUR PHOTO BY W. C. BARTLETT.

UPPER SACRAMENTO RIVER.
Winner of 1st Prize in RECREATION's 6th Annual Photo Competition.

COL. TAURUS.

J. W. BRADY.

He was my friend and I loved him. He was 4 years an inmate of my home, and he won and retained the affection of the family. During the winters of those years he was my constant and often sole companion in the pursuit of big game in South Florida wilds. We were both ardently devoted to field sports, and in the open season we spent weeks at a time together in the woods. I never saw his equal at stalking a deer, and he never tired of hunting. During the time he was with me I never heard his voice. In early youth he had contracted influenza, which, failing to kill him, bereft him of voice and the sense of smell. Happily his hearing and sight were not impaired, and he grew up with considerable intelligence.

He was different from all other mutes I have known in that his temper was amiable and his countenance was frank and pleasant. You looked in vain for that drawn, painful expression so common with mutes. His large brown eyes always returned your look with a smiling light, and he was everybody's friend. Having been brought up in the backwoods of Southern Florida, and his opportunities being further limited by his affliction, the Colonel had his prejudices. He had great contempt for all dogs, especially hunting dogs; he disliked swine, and detested colored people. His hearing was acute. I never had to speak twice to attract his attention, but I have heard my colored man, Steve Tatum, bawl at him at 40 paces without receiving the slightest recognition. The Colonel and I became acquainted through our mutual love of hunting. Before knowing him I rambled the woods day and night with a professional hunter named Kirkland, and many a buck and gobbler died by our rifles. Kirkland was a typical Florida cracker, but able to read and write and with more than ordinary intelligence. He had spent his whole life hunting. As was to be expected, he had his idiosyncrasies and superstitions. He was so fully convinced that a deer's eyes would not shine, that is, reflect a jack light, on the first night after a new moon that he would never go out on those nights no matter how much entreated. Neither, according to his theory, could deer be found the following day; so he stayed in camp 24 hours once a month. Another superstition of his was that venison would not spoil, no matter how unfavorable the weather, if you cut away and destroyed the particular part of the carcass indicated by the sign of the zodiac at that particular time. For instance, if the almanac showed the sign in the loin, the loin must go. But he knew all about game, its habits, where to look for it at different seasons, and how to approach it. Few deer that he saw escaped his rifle.

Lying around our camp fires at night in the solitude of the forest we talked of many things. One rainy night he told me about Taurus. It was a peculiar story, and, briefly stated, about as follows: One morning his wife saw a weak and emaciated little fellow looking wistfully through the fence of their cabin clearing and moaning in pain. She went out to him, and when through fear he tried to retreat, she leaped the fence, overtook and detained him. The waif was nearly dead from hunger and exposure and was covered with vermin. He was given food, a bath containing insecticide, and was put to bed. It was quite an episode in the cabin. The Kirklands had no neighbors, and where the little chap could have come from was a mystery. No one came to claim him, and as time passed Kirkland evolved the theory that the little fellow was of good family, had fallen, or been thrown from a tourist Pullman car, and had subsisted in the woods as best he could until chance led him to the cabin.

That winter was an inclement one, and before the waif's terror had worn off the exposure he had undergone brought on influenza and he came near dying, but finally recovered.

At first he had been dubbed Colonel, but later the name Taurus was added, after the zodiacal sign at the time of his appearance. Kirkland told me much of Colonel's ability as a hunter; how he could track a deer by sight better than a panther could by smell, and could by hearing locate turkeys in the high brush.

One day at the beginning of a close season I received a letter from Kirkland saying that as he could hunt no more until fall he was going to work in a distant part of the State. He requested me to give Taurus a home, urging that he would be a valuable hunting companion for me in the winter months and would give no trouble in the off season. After some reflection I consented.

Taurus came, and I was greatly surprised at his appearance. I had imagined a tall, lank, weazen-faced cracker, gibbering and making signs. He was, on the contrary, short, stout, deep chested, with full round face, fine eyes, and was the embodiment of good nature and geniality. With never a word he walked right into our affections and made himself at home from the first.

I had been given to understand that his one accomplishment was hunting; so he lounged around the premises in idleness through the summer. He became popular with the town children and played with them in the street a great deal, but his play was rough at times, his humor seeming to lack a balance wheel. Occasionally he would throw himself against a boy with such force as to hurl him to the ground, and sometimes he took liberties with the girls that mussed their skirts and exposed more white than was seemly. These excesses seemed to spring from no evil design, but from the exuberance of an innocent, childish nature.

If his tomboy capers were rebuked he would instantly retire to the front veranda and sit on the steps in a contrite attitude the remainder of the evening.

He was suspicious, and nothing escaped his sight. If a stranger came on the lot he watched him continually, and would openly follow any negro, clearly evincing his opinion of the dishonesty of the race. Two things invariably made his angry, tramps and skunks. He drove the former off the premises, and in hunting he annoyed me by always stopping to kill any luckless skunk the trail led us on. He did this feat deftly, too. I never saw him get perfumed by a skunk but once, and as my remonstrances had been in vain I was secretly gratified at his mishap.

As the hunting season approached he became restless, and when at last we were off he seemed beside himself with joy. He loved the solitude of the forest, the chase and the cheery camp fire under the pines by the lakeside.

In our rambles I talked to him a great deal and he answered by signs and glances. He never carried a gun. He had learned the art of trailing a deer by his sight while living with Kirkland, and he seemed to consider that his only part of the work and the sport. It was marvellous how well he did it. I watched him a long time trying to learn his method, but I never got beyond the patent fact that he looked not close under foot for the track, but 20 or 30 feet ahead. He knew a fresh trail from an old one instantly. On the open sand hills this was something that always puzzled me. In good weather a track 24 hours old and one 3 hours old were alike to me, but not so to him. He never made a mistake in that respect. When we struck a fresh trail he took the lead and I walked a few steps behind. If the trail led across rough ground where grass, leaves or pine needles were thick I sometimes had to wait for him a little, but he always, or nearly always, lifted the trail across, and he knew intuitively when we were approaching the bunch of palmetto or bush clump where the quarry lay concealed.

Sometimes we would follow the trail of a buck only to have me empty a magazine without effect; this did not annoy Colonel so much as it did me. He would calmly start off across country to find another track.

One season we found a hard problem in the spoor of a large buck, distinctly marked. The outer section of the rear right foot turned outward, and this made that buck's track easy to distinguish from all others. We got on it several times, and after following it long distances it would seemingly disappear from the face of the earth. Wide circuits over soft ground would not raise it again. Once we lost the trail on an open sandy hillside where it should have been plain. While waiting for Taurus to puzzle it out I happened to raise my eyes to the crest of the hill, 500 yards away, and there stood, outlined against the horizon, the most magnificent buck I have ever seen. His majestic head and antlers were beautifully poised, and he was looking down the slope at us in apparent disdain. I called Taurus's attention to him. While we stood foiled but admiring, the buck sprang gracefully over the crest and disappeared. We went on to the top and viewed the track. It was the same one we had been trailing.

Other hunters had followed that marked trail. My brother-in-law, Moore, had seen the track and followed it many hours at a time. He and Taurus and I quit other tracks when we found this. We named the buck Slewfoot. He was so elusive that after a season or 2 others stopped hunting him and followed less cunning quarry. Indeed some hunters began to believe that Slewfoot was a phantom buck. He was frequently seen, but always under such circumstances that he escaped. One time as Moore, Taurus and I were driving into camp on the North end of Crooked lake, our rifles in their cases under the wagon seat, Slewfoot arose in front of us and stood like a statue. (See Frontispiece). There was a desperate clutching at the gun cases, but before we were ready the buck ran slowly and gracefully over the hill and away. The most tantalizing part of it was that he passed in an oblique course within 30 yards of the wagon. His eyes and the poise of his head denoted defiance rather than fear, and the stateliness of his motion negatived the idea that he was running from us. Moore was livid with vexation, and I felt my heart beating in my throat. Taurus was sitting in the rear part of the wagon when I turned to look at him. His attitude plainly said that the poor mute, usually so gay and frolicsome, was now dominated by fear. After a moment I understood it. The frequent unexpected appearance of the buck, always at inopportune times, had at last converted Taurus to the belief that the animal was a phantom. Moore and I exchanged a knowing smile, and I think each of us registered a silent vow that our mute friend should yet assist at the funeral services of Slewfoot.

Three hours later we coaxed Taurus to take up the trail for us, hoping we would catch the buck napping some miles away, but several hours' weary marching brought us to a dense swamp several miles wide, where we gave it up. Although we were successful in bagging less desirable game we saw no more of Slewfoot on that trip

The desire to kill that particular buck now became a passion with Moore and me. And so fearful was each that the other would get him we used to run away from each other to hunt him alone.

I felt that I had the advantage in having Taurus. He would not have gone with Moore without me.

Toward the close of one season Moore slipped out alone for 3 days in the vain hope of catching the charmed buck off his guard. When he came in he gave me an account of the trip in the presence of Taurus. He said that twice while gliding about with eyes alert he had turned to find Slewfoot gazing at him from the top of a hill in the rear. Another time he had a point blank aim, when the gun snapped and the noise betrayed him.

Taurus looked wise, but whether in the belief that the deer was a phantom and therefore protected, or from something else, he could not tell us.

But when Moore was gone a thought came to me. In all probability the buck saw more of Moore than the hunter had seen of him, and had perhaps seen him drive off for home. Now he would expect a season of rest and would be less guarded in his rambles. Therefore it was a good time to kill him. So Taurus and I went, secretly, as Moore had done. We found Slewfoot's trail without difficulty. What was more, we found Slewfoot himself. He was walking up the side of an open hill among the pines, apparently unconcerned. Taurus trembled perceptibly. I opened up at 75 yards with a 38-55 and felt sure he was my meat. Long before he was out of range I had emptied the magazine. At the last shot the buck stopped, whirled around, gazed down the hillside at us a few seconds and then galloped off.

Taurus threw himself on the ground without the least manifestation of surprise or annoyance. I was angry and said things.

The next season when we went out we did not search for Slewfoot's trail. When Taurus would pass it over and give preference to another both Moore and I would pretend not to notice. One time Moore was coming into camp by moonlight from a turkey roost and surprised Slewfoot on a knoll within 100 yards of the camp fire. On that occasion Moore carried a shot gun, and although he pulled both triggers and his buck shot tore the foliage in line, the buck galloped off. That clear miss at 40 yards fixed Moore; he went over to the "phantom" party.

Taurus and I had many happy days and nights together around Crooked lake that season, but did not waste any more time looking after Slewfoot. Sometimes we saw his track alone, sometimes with a herd. Occasionally we heard that some other hunter had emptied a magazine at Slewfoot without effect, and that always made us feel better.

In the fourth season Moore and I had great sport. Emboldened by the possession of several pairs of fine antlers we began hankering again after Slewfoot. It seemed Taurus was similarly affected. He began to follow up the trail with avidity, and we got the phantom in 2 or 3 close places. One time he made so much noise in getting into a swamp his materiality was abundantly apparent; but his usual luck attended him and we came out without him.

One evening while the full moon was rising Taurus and I sat on the piazza. There were but 2 more days before the close season would stop our fun. Taurus was watching the smoke curl from my pipe.

"Taurus," I said, "let's drive out to Crooked lake to-night and kill Slewfoot to-morrow." He sprang off the veranda far out toward the gate in glee at the proposition.

In 10 minutes, with Steve Tatum driving, we were on the way; at midnight we were in camp. Next morning Taurus and I found the trail. We followed it with the dogged persistency of Indians. It went everywhere, sometimes in swamp, sometimes in oak hummocks, but mostly in the high, open pine hills amid the small deep lakes. At noon we were still tramping; at 2 we were tired; at 4 nearly worn out with the long strain; at 5 we found him. Taurus was staggering and his eyes were watery with fatigue; the strain had been terrific. We followed the cunning old buck all day only to find him back at the big lake, lying in a patch of palmetto on a narrow point of land near our camp.

The lake was miles wide, and we had him cornered. I was sure he was there, for the trail led in and had not come out. We had approached quietly and Slewfoot was probably asleep. I motioned Taurus to go around and enter the palmetto from the opposite side.

He hesitated. He seemed weary, and I thought I saw that same fear in his eyes I had noticed before; but I did not mean to lose Slewfoot then. With some temper manifest in face and gesture I motioned Taurus to go in and force the buck out. He turned and was gone. I took my stand at the best place, facing to catch the light from the setting sun on the rifle sights. In a moment I heard Taurus leap into the palmetto with a great noise, and instantly the startled buck sprang up and came on to his death. I held my fire until he was within 30 feet and broadside on. The bullet crashed through his body and he fell.

I ran forward. The buck sprang up and bore down on me. I threw in another cartridge while stepping backward, and as I did so was tripped by a loop of grape vine and fell prone on my back, the cartridge exploding overhead. The buck charged, but the same vine that tripped me caught in his horns and swung him upward and outward from me. He disentangled his antlers and again charged, as I was getting to my feet.

Taurus came up with a great rush. He threw himself directly between the buck and me, and caught him by the neck. Quick as thought the animal tossed Taurus high in air and he fell at the base of a large pine. In a second the infuriated deer was upon him. I fired and the bullet went through Slewfoot's heart, but it was a half second too late. His horns went through and through the prostrate form of my friend, bending his body like a hoop around the base of the tree. There was a wide opening of the Colonel's eyes, a shiver, and he was dead.

Steve Tatum came from camp at my call, and we considered what we should do. It was 30 miles home and night was coming on. It was preposterous to think of hauling the mangled body of Taurus 30 miles in a hunting wagon. When the full moon was high and no sound was heard save the hooting of owls, Steve and I dug a grave with an axe and a board, and by tearing up our 2 camp chests made a box long enough for a rude coffin. In this we placed the body of my silent friend, and as we looked at him for the last time we did not try to suppress our tears.

He rests out there now on the highest sand ridge at the North end of Crooked lake. From his grave you can see the water glinting for miles to the Southward. It is a pretty place, but solemnly lonely, and perhaps Slewfoot's progeny browse at night near the grave of my friend.

I do not hunt much now, but I go out to Crooked lake in the heated term to rusticate, and, if the truth must be told, to be near Colonel Taurus. On one of my recent trips I carried a marble slab that now stands at his head as a testimonial of my regard. On it one reads:

Hic jacet,
COLONEL TAURUS,

Who died down yonder
where the antlers are nailed
to the pine, that I, whom he
loved, might live.
Like Byron, the cynic, I erect
this stone to the memory
of my Best Friend,

A DOG.

The ornithorhyncus went over the hill
To view the remains of a pterodactyl.
"A queer bird was Terry,
A funny one, very";
Said the ornithoryncus a-scratching his
bill.
—Carolyn Wells, in Judge.

HUNTING FOR A PLACE TO HUNT.

H. H. TODD.

Our quartette had hunted together each season until it became natural to ask, "Where shall we go next fall?" During the spring of '99 we planned a grand trip to Idaho. How careful were our preparations! We wrote to all parts of the State, and after culling out the answers thought we had struck a nugget. Three of us left New York September 4, on one of the luxurious trains of the New York Central. The views along our beautiful Hudson, the Mohawk valley, and the prosperous farms and cities of Western New York, and of Ohio and Indiana, passed in quick succession, and in a few hours we were in the great city of the middle West, Chicago. From there to Omaha by night shows the progressiveness of the Chicago, Milwaukee & St. Paul Railway, with sleepers equipped with electricity and in each berth a separate lamp. From Omaha by the Overland Limited found us in a luxurious hotel on wheels. Its dining service can not be excelled, while the combination car, with its library, periodicals, writing facilities, its barber shop, bath, and café, to say nothing of its comfortable armchairs, leaves little to be wished for. The scenery is grand and the changes rapid, flying past the great cornfields of Nebraska, W. F. Cody's ranch, and reaching the foot hills of the Rockies, where with an extra engine the ascent begins. At the different stations the 4 and 6 horse stages wait for the mail, which reminds of bygone days, when they were the only means of transportation across the plains. The buttes of the Green River valley look as though they had been placed there to fortify the town.

GREEN RIVER, WYOMING.

At Granger we took the Oregon Short Line, to find many similar scenes, together with the fertile valleys and prosperous farms of Southern Idaho. At Diamondville the track runs over the opening of a coal mine, and the sidings are filled with modern 50-ton steel cars loaded with black diamonds awaiting shipment. Thrift and progress are on every hand. Passing through Oregon and Washington, we took the steamer at Riparia for Lewiston, and that is a delightful sail, with its many turns, and steep cliffs on either side. The

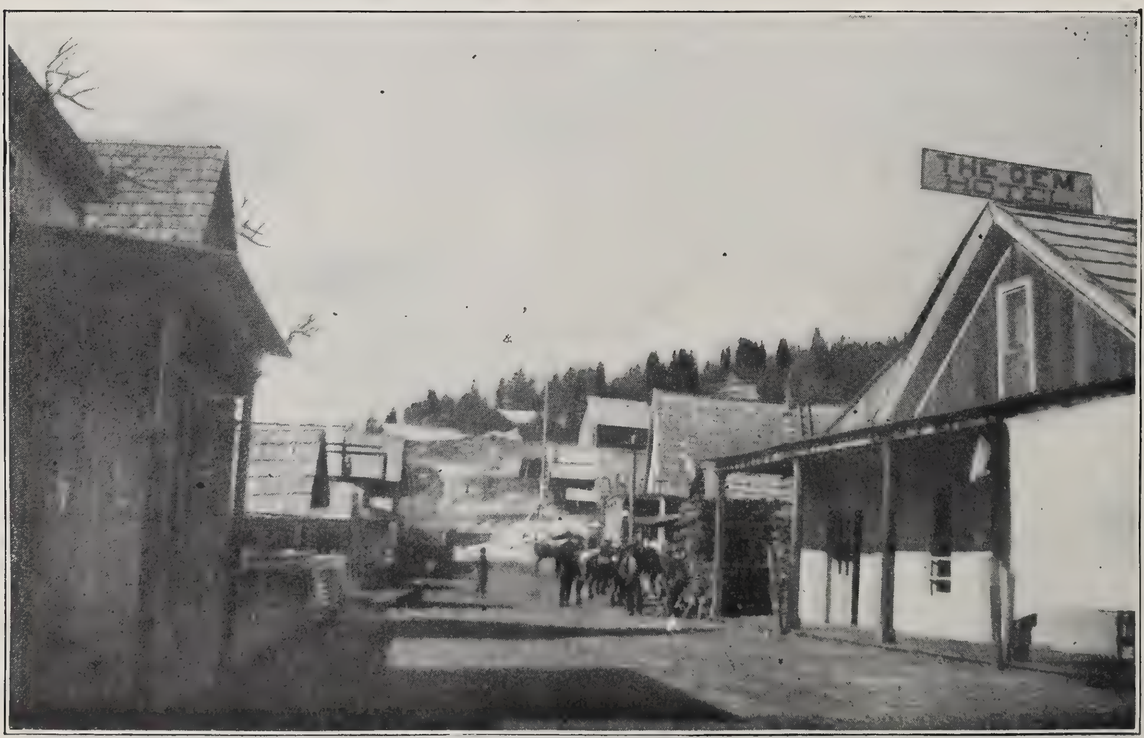
MONUMENT TO LIEUT. FOSTER, U. S. A.,
COTTONWOOD, IDAHO.
(Killed in Nez Perce War.)

NEZ PERCE INDIAN BOY AND HIS CAYUSE.

trip seemed short, and we were sorry when we reached the end. From Lewiston to Grangeville, 74 miles by stage, was novel, but a little tiresome, although a large part of it was through historic ground, passing over the battlefield of the Nez Perce Indians, with the monument erected to Lieut. Foster standing in the middle of the stage road down Cottonwood hill. Crossing Camas prairie we reached the town of Grangeville, Idaho, made famous by the gold strikes at Buffalo Hump. There we met our guide, M. A. Bates. He assured us that we would reach the Chamberlain basin in about 4 days, but when we looked at the outfit he had provided we doubted it, for another such lot of crow baits it would be hard to get together! Gaunt, sore, and worn out, they seemed hardly able to get around; but Bates assured us it was their nature, and that they were in good condition for the trip, so off we started, at 4 P. M. Monday, camping about 10 miles out.

The next morning we were awakened by a lot of Nez Perce squaws and children, who had been after huckleberries and were homeward bound. It was a novel sight to see the squaws straddling the horses, with the papooses strung on behind and before, and we tried to take a photograph, but with poor success, as the Indians are very superstitious. One lad of 14, after much persuasion, allowed us to snap him.

That day we made about 30 miles. We reached Adams' camp at noon, and had an experience we will all remember. We were passing through a stretch of burnt timber when a wind storm struck us that felled the trees in all directions. Close by us they would crack and tumble with a roar that was anything but pleasant, so we were glad when we reached the clearing, and could listen to the cannonading from a distance. That night we stayed at Boulder Creek.



WARRENS, IDAHO.

FORDING THE SALMON RIVER.

The third day we passed through the old mining town of Florence, out of which it is claimed over 50 millions of dollars have been taken, and nightfall found us at the State bridge on the Salmon river, ready to take a well earned rest. The fourth day we used up in climbing the 14-mile hill, from the Salmon river to the hot springs, where we stayed over night to get a bath in water that came out of the earth at over 100 degrees. The fifth day found us at Warrens, which is a thriving mining town, where many pack outfits start from. All around it the ground has been worked with placer mines, until the whole valley looks like the seashore, with the sand piled up in drifts. The Chinese still work the old diggings, making small wages.

At that time our troubles began to thicken. As we had thought, our horses were used up, and we were apparently as far from our hunting ground as when we started. After a conference we demanded of Bates a new outfit; also to know whether he knew where he was going. He admitted that he did not know the country very well, and finally consented to hire an extra guide, and get some new horses; so on the sixth day we started with new hopes, fording the South fork of the Salmon river about noon. The river was waist deep, with a swift current, and many round boulders on the bottom, so we had to be cautious as we rode across. but made it without mishap, and camped for the night about 5 miles beyond, on Elk creek. The seventh day we had a rather rough trail, lost one horse in the woods by not picketing him, and another, which was completely fagged out, we had to leave behind. We had seen no game since we started, and we began to think we were up against it. That afternoon we crossed a high ridge, from which we could see the Bitter Root range, 60 miles away, and camped on Smith's creek, reaching there about 8.30 P. M.

The 8th day we were positively assured that we would be in the basin in 2 days, but with past experiences, we took the statement with salt. However, we started early, leaving the pack to follow, and reached Mosquito Springs, where we found the coldest water I have ever had the pleasure of drinking. About dusk, Bates came hurrying along, leading a pack horse, and gave us the pleasant information that most of the pack horses were lost, so they would not reach us that night. You can imagine how we enjoyed that. Eight days out, no sign of game, with worse prospects, and our outfit lost! That was indeed a pleasant outlook; but we dined on what we had and spread our blankets for a sleep.

The next day, of course, we had to wait for the packs to reach us. We fell in with a scout and prospector, known as the Yellowstone Kid, whose outfit consisted of 2 jacks and a dog. He had killed a bear, so we had our first fresh meat. While waiting, we hired him to take us out, and came back in the evening with one blacktail deer, which was the only animal shot on the trip. About sundown our outfit arrived, minus one more horse and part of the pack, including my boots, which, being wet, had been thrown over the pack to dry.

We engaged the Kid for a week, and on the 10th day we reached Ramie Meadows, where we expected to find game, but, like

COL. R. E. MOSS, AND THE BEAR HE DIDN'T GET.

ON TOP OF THE BITTER ROOT RANGE.

the rainbow, it was not there, as we found after diligent search. The evening of the 11th day, we held a council of war, and were inclined to quit, but decided to give the guides one more chance, and on the 13th day we arrived in the Chamberlain basin, which we were to have reached in 4. We made camp about 4 P. M., and Billy insisted on going out to find some fresh trails to work on in the morning. Night came, but no Billy. In the morning, after we had eaten breakfast, along came Billy, sidling into camp. In answer to questions, he said he had gone farther than he thought, so made a fire and went to sleep. He had not seen any game, but came on a very hot trail in the middle of the night, and when he turned around, the seat of his trousers told the rest.

We hunted there faithfully 2 days, without seeing a hair, and then, as our time was limited, and our spirits down to zero, we started for home. We had many experiences, such as a dry camp and no water for 24 hours, but not a sign of game. Finally we reached Grangeville, 3 weeks out, having seen only one deer on the whole trip and a bear cub, tied to a post in one of the back yards of Grangeville.

I would not have you think from this that there is no game in Idaho. There is plenty of it, but you must get the right guide to take you to it, or at least one who knows the country over which he travels, which our guide did not. Of course we came home much disappointed as to trophies, but we had obtained a wealth of experience. We had had healthy exercise, rough, plain fare, and the climate, which would alone repay for the trip. We had enjoyed the grandeur of the scenery in the mountains, as our horses wound their way along the narrow trail, with the river many hundred feet below, and again as we stood on some peak, and through the clear atmosphere saw ridge after ridge of mountains in the far distance, with beautiful lakes nestling down in the valleys. We felt fully repaid. It was with deep regret that we started on our homeward journey. The small animal life, the grouse shooting and the trout fishing, added no small part to our enjoyment; so that after counting up both sides we felt that, after all, we had a good time. As to game, we were no hogs any way, for as members of L. A. S. we can get lots of enjoyment out of a trip without slaughter.

"Good mawnin', pahson, what kin we do foh you?"

"Oh, I'se jest makin' a pastoral call."

"Well, goodness me! Den I'll go right out an' kill a chicken."—Indianapolis News.

AMATEUR PHOTO BY H. S. WALKER, JR.

VIRGINIA DEER.

Winner of Special Prize, offered for best photograph of a live wild animal; RECREATION'S 6th Annual Photo Competition.

AMATEUR PHOTO BY H. G. HIGBEE.

FLY FISHING.

Winner of 3rd Prize in RECREATION'S 6th Annual Photo Competition. Made with Pony Premo Camera, Lovell Plate and printed on Velox paper.

THE FARMER'S PETITION

A. L. VERMILYA.

Now the autumn days are with us, and the hunter's got his gun
Sighted fine for every object from a grizzly to a bun;
And we farmers have been humping to devise some kind of plan,
So that when the season's over we'll still have the form of man,
'Stead of being mossback angels, wobbling lonesome in the skies,
Wearing overalls and whiskers and a look of pained surprise.
For the blithesome city sportsman is a most peculiar cuss;
He will shoot a feller's head off, and then say, "Glad it is no wuss."
He will shoot with all the rashness that at home he shoots the chutes,
And he'll fill us full of bullets from our scalp-lock to our boots;
But it's really quite annoying, when the hunting season's gone,
To go limping round on crutches, with our features kinder drawn
And our systems out of kilter, having most too many holes,
Which let in the chilly weather onto our immortal souls.
So we've got up a petition—listen, sportsmen, here it is—
It's a very mild production, and the reading runs like this:
"We, the farmers of the backwoods, most respectfully do pray
That you hunter chaps won't shoot us when we happen in your way.
And believe us, we are sorry—mighty sorry—that we're here
Just when all you city fellers want to shoot the moose and deer;
But you see our farms are scattered round the country hereabout,
And 'twould seem most awful cruel for to drive us farmers out,
Course, we know we look like 'critters,' from our trousers to our hair,
'Cause you say, whene'er you shoot us, 'Thought it was a deer or bear!'
But we can't help looking wildish, living careless-like and loose,
And a second glance would tell you that a farmer ain't a moose.
Shoot our chickens and our turkeys; shoot our horses and our calves;
Shoot the atmosphere and landscape into quarters, thirds and halves;
Shoot the sheep within the pasture; shoot the piglet in the pen;
Shoot the cows around the straw-stack; shoot our oxen now and then;
But while all the game you're shooting—everything both low and high—
We do beg most blamed respectful that you'll kindly pass us by.
For a bullet in the liver or a buckshot in the back
Is most cussed inconvenient, and it puts us out of whack.
We ain't what you might call anxious to get riddled like a sieve,
For, you see, it's kinder nat'ral for us chaps to want to live;
Therefore, if you come a-hunting while the autumn breezes blow,
Though you shoot up all our live stock, let the busy farmer go."

Mother—What! Have you been fighting again, Johnnie? Good little boys don't fight.

Johnnie—Yes, I know that. I thought he was a good little boy, but after I hit him once I found he wasn't.—Somerville Journal.

HUNTING IN THE BAKER RANGE.

T. C. AUSTIN.

The ever restless spirit of the pioneers of the Northwest is like the tide of the ocean, beating and throbbing against the rocky shores in its effort to escape its imprisonment. The old hunters and trappers of the Hudson Bay Company first opened the pathway to Puget sound, disclosing a field of adventure which several generations have been unable to entirely subdue. It is only within the past few years that the mountain fastnesses surrounding this great body of water have been explored and the leaves of Nature's book opened to the hungry eyes of the naturalist.

The Baker range of mountains was, until the summer of 1886, an unwritten page, never having been trodden by the foot of civilized man. During the early part of that year gold was discovered on the Similkameen river, one of the tributaries of the Columbia, East of the Cascades. The gold seekers were compelled to make a long, circuitous route, through British Columbia, in order to reach the new El Dorado, and the fact that they were required to pay tribute to their British cousins was exceedingly disagreeable to them. An effort was accordingly made to pierce the then unexplored Baker range, thus securing a trail altogether on American soil.

Accordingly, on the 12th of July, 1886, a party, consisting of William Powell, an old '49er; Professor J. Y. Collins, an enthusiastic naturalist; Banning Austin, an experienced civil engineer, thorough woodsman and experience hunter; T. H. Dehaven, Samuel Belford and David Meyers, all hardy men, left Bellingham bay for the purpose of making the necessary exploration.

Each man carried on his back a pack weighing about 60 pounds. This included rations for 2 weeks, which they supposed would be ample time in which to reach the mining camp.

The first few days of their journey were uneventful other than that they were amazed by swarms of mosquitoes in the valleys. On the morning of the 16th, while traveling in the valley of the North fork of the Nooksack river, they came in view of the great glacier of Mount Baker, about 10 miles away. The sun was shining on the face of the crater, in which the glacier is formed, showing thousands of feet of ice and snow, over which danced every color of the rainbow. Added to this, the noise of the rocks and ice, tumbling from their lofty heights, made the scene grand and awe inspiring in the extreme.

The country over which the men had passed was an interminable jungle of fallen timber and underbrush, and as they approached the mountains, new difficulties were encountered. Immense canyons blocked the way, while the streams which they were compelled to cross were ice cold, being fed by the snows on the mountains. These streams they found full of trout, which partially repaid the travelers for the suffering encountered in crossing them.

The next morning the journey was renewed, all the party being in good spirits. Now and then they halted to regale themselves with the wild huckleberries covering the mountain sides. During one of the pauses Powell, who was slightly in advance, shouted for Austin, who carried the only gun, that he had routed a bear. Hastening forward, Austin discovered a black bear cub ensconced in a fir tree about 100 feet from the ground. A single shot disposed of it and furnished the party with the first fresh meat they had had since starting. That night they camped at the foot of a red butte, which they named Baldy.

Four of the party ascended this mountain the following day, in order to obtain a view of the surrounding country. On reaching the summit Austin looked down the mountain side, and, about 1,000 feet below, discovered 2 mountain goats slowly working their way toward where he was standing. Onward they came, slowly but surely, passing the edge of an immense precipice, over the dizzy heights of which one misstep would have hurled them on the rocks several thousand feet below. The hunter at once began working his way toward the unsuspecting animals, and succeeded in getting within about 200 yards when he opened fire. The first shot missed, but the second took effect, when over the goat went, falling at least 100 feet before striking. It dragged itself about 1,000 feet farther, to a large bank of snow, and gave up the ghost. The action of its companion was indeed pitiable. Glancing down the mountain to where its mate lay, it made its way down by a different route and lay down by its side. The dead goat was easily secured, and the meat formed a welcome change for the prospectors. Professor Collins preserved the head and horns, carrying them all through the toilsome journey.

The party proceeded to the Northeast side of the mountain, and as the atmosphere was extremely smoky, decided to again ascend and then try to make observations. On the morning of the 20th the ascent was made. The smoke hung low in the valleys, and therefore did not interfere materially with their view. The scenery was most beautiful. To the North and East they could count over 100 peaks; while vast fields of snow extended North as far as the eye could reach. At intervals could be heard the roar of an avalanche, as some great bank of snow broke from its moorings and started downward on its journey of destruction.

The camp was on the head of a small stream. It was decided to follow down that, and on the morning of the 22d the men arrived at the Chilaweyak. The course they had marked out took up this stream, and undauntedly they again turned toward the region of perpetual snow, through interminable intricacies of fallen timber and underbrush.

The provisions were beginning to run low, and no game had been seen since the goat was killed. On the 26th it rained all day, and all hands remained in camp, rolled up in their blankets, until the gnawings of hunger drove them out.

Starvation then began to stare them in the face. The allotment was one biscuit a day each to each man, with such berries as they could find. The fearfully hard work of tramping over the rough country they had encountered, together with the lack of provisions, began to tell on them, especially on the old members of the party.

By almost superhuman exertion they reached a point, on the night of the 27th, where they could see the head of the stream they were following. The next day they turned more to North, determined to get above the jungles and nearer to snow line, with the hope of securing meat of some kind.

Owing to the extreme weakness of some of the men, camp was pitched at 3 o'clock, while Austin took his rifle and went on up the mountain in search of game. He traveled but a short distance when he saw 7 goats standing on a cliff of snow and ice looking at him. He stepped behind a rock for the purpose of stalking them, when the whole band wheeled and disappeared.

He then started toward the summit and had gone but a few hundred feet when, looking to his left, he saw a fine buck within easy range standing on a cliff of rock. Never in his life had he been so anxious to make a sure shot as then. Carefully he rested his rifle on a cake of ice and pressed the trigger. At the report the goat tumbled over the cliff and out of sight into one of the rifts of the glacier. As Austin attempted to extract the shell it stuck fast, and as he was tugging at the lever 6 more goats came picking their way down the ridge on which he was standing, passing within 30 feet of him.

He broke every blade from his knife, but to no purpose, and was compelled to watch the animals pass out of sight. Then he returned to camp to give the sad news to his comrades. As he entered the camp his white face startled his companions, and Professor Collins hastened to ask,

"What is the matter, Banning? Have you seen a ghost?"

"No," he replied; "worse than that. I have been within 30 feet of 6 goats and did not get one of them."

For a time the men were almost stupefied. That shell must be removed or they must starve. They commenced to work more carefully than ever before. The gun was taken apart, piece by piece, and the barrel heated. To their delight, the shell dropped out, and general rejoicing took the place of despair. The rifle was then put together and greased with a piece of bacon rind, all they had left.

The next morning it was raining quite hard, but meat must be had; so the gun was tried, found to be all right, and Austin, accompanied by Dehaven and Belford, with their pack straps, started up the mountain. After a climb of 3 hours they got above the clouds. While walking along the summit 4 goats were discovered on a ledge, some distance below; 2 old ones and 2 kids.

Belford and Dehaven remained on the summit while Austin went in pursuit of the quarry. He soon got within range, and the first shot killed one of the old goats, but she fell into the canyon below, out of sight. The next shot knocked the other over, and after falling and rolling down the mountain, several hundred feet, she also disappeared over the same frightful precipice.

The little ones were next attended to. One of them went after the dams, but the other was finally secured, after a perilous climb, by Austin and Dehaven, of fully 1,000 feet.

The hunters then returned to the camp highly elated but extremely tired and hungry, having gone the entire day, the most perilous of the journey, on their one biscuit each. They arrived late, but soon recovered their spirits while enjoying broiled goat meat, and shortly rolled up in their blankets to dream of home.

During the night the fire burned low, when 2 of the men got up to replenish it and saw the most beautiful sight they had ever beheld. They described it as follows:

"The clouds had settled below us and the moon had arisen full and beautiful. It shone down on the clouds, making them look, as they wound down the different valleys, like gigantic snow white robes, while about the camp, in all directions, arose lofty peaks, which seemed to pierce the heavens. Occasionally a bright streak of light would dart through the snow white fleece, to be followed immediately by a heavy roll of thunder, seemingly shaking the mountains to their foundations.

"On an immense glacier to the Southeast the moon's rays fell full and bright, making the great wall of ice reflect all the colors of the rainbow. Now and then a great mass of ice and snow would go crashing into the depths below, the jar of which, coupled with the thunder, brought to mind the vision of Faust on the summit of the Brocken."

The next day the journey was resumed. Occasionally the party would come to a small park, of 8 or 10 acres, in which grass was growing luxuriantly, while bees were humming and several varieties of song birds sent forth their music, making a pleasing contrast to the desolate country through which the men had previously passed.

Two white ptarmigan were killed, during the day, and were added to Professor Collins' collection. Several bands of goats were seen, but none killed. Camp was made early, and the next morning Austin and Collins started for the summit of the mountain on a hunt, as the meat secured the day before was all gone.

Shortly after reaching the summit 7 goats were seen in one band, standing on the edge of a deep canyon. Collins concealed himself, while Austin went to the head of the draw on which they were standing. Austin soon reached the desired point, when Collins showed himself to the suspicious animals. The band divided, 4 going up the draw while the others followed around the canyon on the snow. The first 4 came within 50 yards of the hunter, who opened fire, killing 2 with the first 2 shots. One of the goats rolled into a crevice in the snow, while the other tumbled down the mountain side fully 2,000 feet, lodging against a big boulder. A third shot broke the leg of another goat. The rifle spoke again, when the animal ran a short distance and fell dead.

Austin followed the fourth to the edge of the snow, getting within about 200 yards of it, and by a fortunate shot laid it dead in its tracks.

Three of the goats were carried into camp and were estimated to weigh 200 to 250 pounds each. The next morning the fourth one was secured, and proved fully as large as any of the others. The party was thus well supplied with meat, and remained in camp 3 days jerking goat meat for the remainder of the journey. They christened this Goat Camp.

On August 2d the men started for a large lake, which they could see, about 6 miles to the North, and which they reached during the following morning. On the 4th they continued their journey along the East shore of the lake, and about 9 o'clock came on the ruins of an Indian camp, which had probably been used many years before, while hunting in the surrounding mountains.

A short distance farther they came to a glacier stream, and while deliberating on the course to take discovered a grave in one of the most desolate and dismal spots imaginable. A cedar tree near bore the following inscription:

"Sacred to the memory of Michael Brown, a native of Galway, Ireland. Drowned in Chilaweyak lake, October 10th, 1858. Member of the 9th U. S. Infantry. Found June 18, 1859, and buried by his comrades. Age, 26 years."

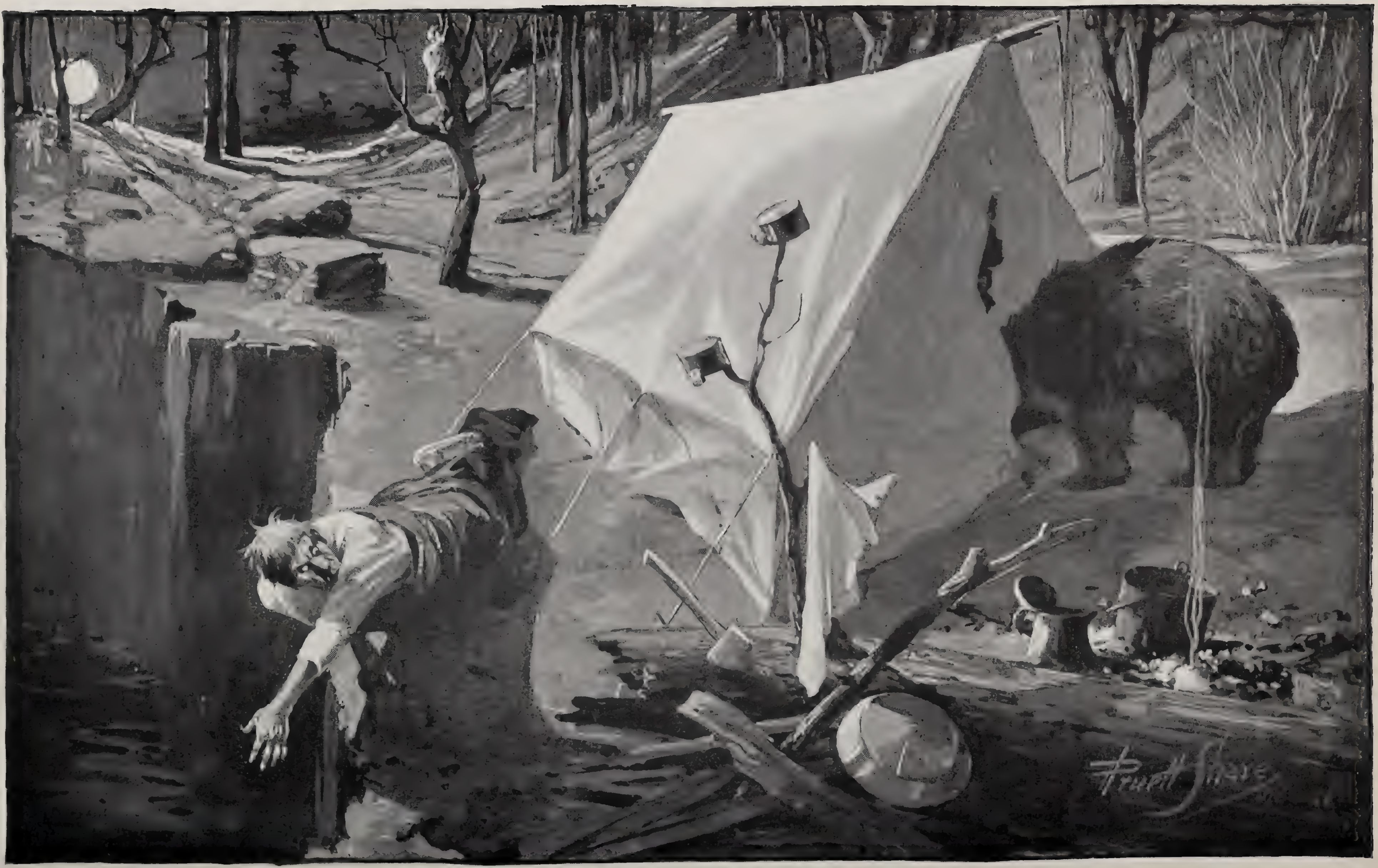
The present party were probably the first white men to visit this grave since the burial of the soldier, a quarter of a century before.

A two hours' march up this glacier stream took them to the old U. S. boundary survey of 1858, which had been cut 15 feet wide through the wilderness, but was grown up with underbrush. That was virtually the end of their adventures and sufferings, although they had to travel 3 days more over country similar to that through which they had passed, before reaching Cowley's ranch on the Fort Hope trail, where they procured their first square meal since leaving Puget sound.

"Well, if you haven't still got that red vest!" exclaimed the jay bird, when he met the robin.

"They are still the proper thing," answered the robin; "at least, the jays have not taken to them yet."

The early worm here putting in an appearance, society chit-chat was laid aside for the practice of benevolent assimilation.—Indianapolis Press.



I FLOPPED AND ROLLED WITH ALL THE ENERGY OF DEADLY FRIGHT.

AN UNINVITED GUEST.

STANLEY WATERLOO.

We were out after grizzly, Tom Long and I, and we intended to have 2 at least, for each wanted a skin to exhibit in future years as undeniable evidence of his prowess. It was to secure these trophies that we had come from the East to Montana, armed with expensive and deadly rifles and with ammunition enough to carry on a general engagement with a whole drove of bears should occasion arise. We had secured the services of the best guide to be had, an old hunter named Jim Holden, and we were on the hills in late October and in a region where, we were assured by Jim, we should find bear. We had already seen a black one, and had blazed away at it as it disappeared in the scrub, but without apparent effect.

We had set up our tent close to the edge of a slight bluff descending perpendicularly about 15 feet, at the foot of which was a hollow where water had gathered over an area of perhaps an acre. Considerable vegetation surrounded this miniature lake, though the water, at the time of our visit, was not more than 2 feet in depth at its deepest place, which was close to the little bluff. The lake, or rather pond, was a decided convenience to us, and we camped close to the bluff with regard to ease in letting down a pail to get water for cooking purposes. We were there to stay until we found bear. We were supplied to the queen's taste; a native of the valley, with 2 burros, having brought up our traps and much canned food and then departed.

Supper was over, our pipes were lit, and Tom and I talked wisely and well of bear. We hadn't talked of anything else for days. We talked of means and methods and of what we would do in an emergency. I noticed that old Jim smiled occasionally as he listened, but any contempt, covert or expressed, on Jim's past could not affect either Tom or me. We knew our business. We'd never seen a wild grizzly, either of us, but that didn't matter. We had shot almost everything else in our time and felt that we should give a good account of ourselves under any possible conditions. Tom waxed grandiloquent and was disposed to quiz our guide.

"I'll tell you what it is, Jim," said he, "there's been a lot of humbug about the danger attending a meeting with your cinnamon and your silvertips and all the other big bears out here, and about big fights of which you fellows blow so much. You hunters have formed a sort of pool for lying about bears, each one of you standing by the other. That's the size of it. I don't believe a grizzly ever tackled a man unless the grizzly was cornered or too badly hurt to get away. It's all rot; you're a lot of bragging Ananiases!" and he threw a cracker at Jim, who chuckled rather grimly as he dodged.

"You'll know more about bear in a day or 2," he said.

"Will I?" said Tom, "oh, will I? Why, man, it's a dead cinch on a bear when you've got a good repeater. You could kill an elephant with such a gun. It's only a matter of keeping cool. You can't help pumping him so full of lead before he gets to you that he's a dead bear. They're lumbering brutes anyhow. Why, I believe I could murder one of them with this. I'd run around him and ram the point into his cervical vertebrae"; and Tom flourished an awful hunting knife, a foot in length and absolutely new.

Jim only chuckled again, while I joined in with Tom to tell how easy it would be to kill a grizzly, even with a club, if one would keep moderately cool; but, finally, tired of the chaffing, we decided to turn in.

Old Jim simply spread his blankets and crawled in between them, but Tom and I scorned such ancient devices for comfort in the mountains. We knew the night would be cold, so we got out some quarter inch rope from our pack, spread out our blankets, rolled ourselves up in them and then lashed them about us as old Jim lashed the loads on the burros. We said we were mighty certain then that we should not kick the covers off during the night and wake with cold backs, cold feet, rheumatism, etc. We certainly did sleep warm. We had had a hard working day of it, and within 10 minutes from the time we lay down I was contrasting the volume and quantity of my companion's varying snores. In another 10 minutes I was asleep myself.

I was awakened by the most blood-curdling yell it had ever been my lot to hear. No! "blood-curdling" doesn't describe it! It was blood-solidifying! I lifted my head, only to see old Jim dive under the edge of the canvas farthest from the entrance and there disappear, and to see Tom flopping about like a beheaded chicken. It was he who had emitted that yell. I couldn't understand it. I turned toward the entrance. A head had been thrust through, a head which seemed to me as big as a barrel. It was that of a grizzly! Then I yelled myself.

"Woof!"

There was no time for fooling with the

rope fastenings of my blankets. I flopped and rolled with all the energy of deadly fright toward the side of the tent where Tom was. He had got a hand free and was tugging at the canvas. There was an angry growl, and the bear came tearing in just as we rolled out, almost together. Tom was ahead and kept rolling, while I made as good a second as possible. It was all over in a moment. Tom suddenly shot out of my range of vision. He had dropped somewhere. The next instant there was a splash 15 feet below, which sounded as if a whale had broached. I tried, hurriedly and bunglingly, to release myself from my blankets, when—

"Woof!"

The bear was ripping away at the tent cloth. I didn't hesitate any longer. I thought of home and of the friends of my childhood and rolled over after Tom. I missed him by about 3 feet. When about half drowned, and after I had caught up a gallon or so of cold water and weeds and a beetle or 2, I managed to lift my head above the surface. Tom had accomplished the same feat. We got out of our bedding —I don't know how—and stood close up against the edge of the bluff.

"D'you 'spose he'll follow?" gasped Tom in a whimper.

I didn't answer. I grabbed Tom by the arm, and, bending low down in that water, which made the marrow in our bones frappé, we crept silently along by the bluff until we were yards away and then made such a rush as we could across the pond. There was a tree on the bank. We climbed into its lower branches and sat there shivering. To our ears came again an occasional "woof" and growl from the site of the tent.

"I b-b-blieve he's g-got old Jim!" chattered Tom, and I thought so, too.

"Let's call for him," I said. "We're safe enough ourselves, anyhow."

We shouted together, and, promptly, there came back an answer from the vicinity of the tent. We knew then what the situation was. A few yards from the tent stood a solitary tree, a scrub oak, 6 or 8 inches in diameter.

"Where are ye?" roared Jim.

We called back in explanation, and then came an inquiry the most cruelly insulting ever made by one human being of another.

"Ye've seen yer bear. Are ye both keepin' cool?"

Keeping cool! We who had wallowed in and clambered through an acre of ice water! Through teeth that played like castanets we cursed the man in the other tree and threatened to kill him in good time if the Lord but spared our lives; and the old villain only laughed. But the case was getting serious.

"What's the bear doing?" I shouted.

"He's got the tent ripped to pieces and is gettin' away with the provisions. He's big as an ox."

"What shall we do?"

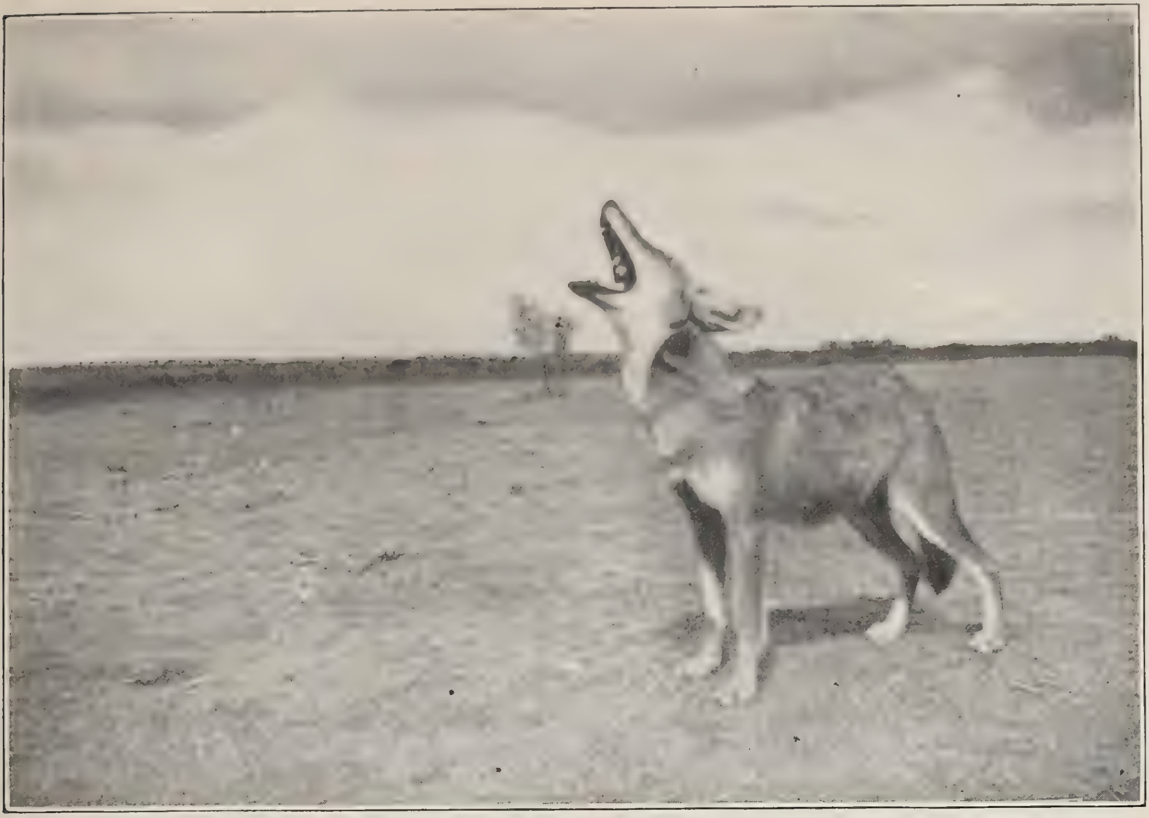
"Do? Nothin' but wait until he goes away. That is," Jim added, "unless you thought to take yer guns along, or Mr. Lorimer's got that big knife with him. There's a good chance now at the old feller's vertebray. He's got his head down in the pork kag."

It was awful, this derisiveness on the part of Jim, but we were helpless. We were in no mood for retort. We were getting more and more benumbed with the cold. Then Jim started out in another vein, and more honest and earnest, telling us to clamber to the ground and dance about until we got our blood in circulation again. It was a beautiful and inspiring spectacle as we followed his advice. We danced furiously until a degree of warmth did come to us; but we kept mighty close to the tree, though reassured by continuous verbal bulletins from Jim as to the bear's whereabouts and occupation. It was a fearful night, the hours passing like days to everybody save, of course, our visitor. It was dawn when he sauntered away, for the time, at least, the best fed monster of a grizzly in all Montana. He didn't pass within 100 yards of us, but Tom and I were in that tree again when Jim called to us that the brute was leaving.

We gathered at the camp and there held counsel. Tom wanted to kill Jim as a preliminary to the proceedings, and the guide was finally spared only because we needed him. The place was the finest wreck of a camping ground ever seen. Jim himself cheerfully admitted that; and of provisions for a month not more than *debris* enough to last a week remained. Still, the tent could be patched together, after a fashion, the guns and cartridges were all right, and the meeting terminated in a council of war. We were bloodthirsty. Jim was with us there, for he had been cold himself. We wanted the life of that particular bear. We got it, too. But that is another tale.

First Doctor.—Has the trouble reached an acute stage?

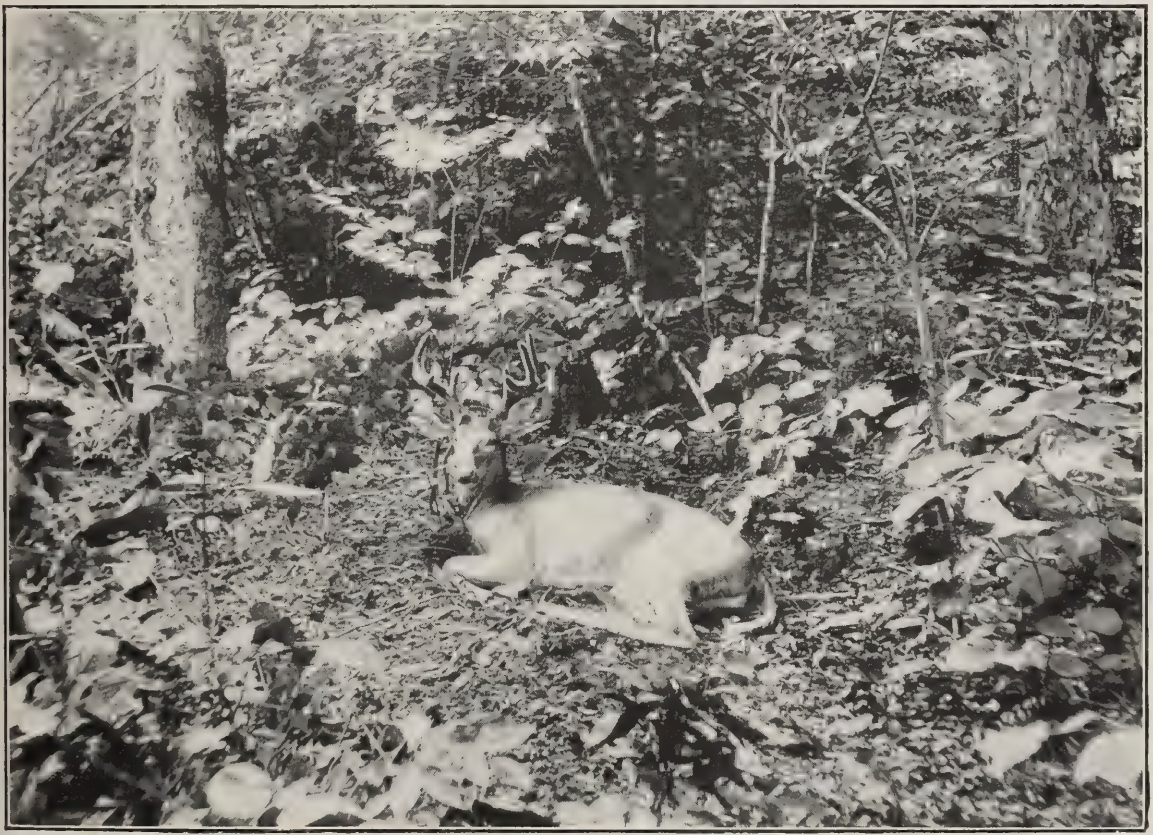
Second Doctor.—I should say it had! I've paid 46 visits and I haven't received a cent on account!—Judge.



AMATEUR PHOTO BY E N. GOOD.

HOWLING COYOTE.

Winner of 4th Prize in RECREATION's 6th Annual Photo Competition.



AMATEUR PHOTO BY MRS. P. B. KIRSCHNER.

RESTING.

Winner of 8th Prize in RECREATION's 6th Annual Photo Competition.

MY FIRST CAMPING TRIP.

REV. J. H. FULLER.

My impressions of the necessities for a camping outfit were obtained from books on camping written by people who, I fear, had never camped. I learned that all a true woodsman needed was a large stock of matches, kept in a dry place, a quantity of salt pork for frying fish, and plenty of salt. Accordingly I laid in an enormous supply of matches, of the 7-day variety, made a corner on the hog market, and took salt enough to preserve all the 6-inch trout in New England. After carrying them many miles over logs and through underbrush, I added them to the offerings which others had already made to the god of folly.

My first night in camp was passed under the canopy of heaven. The day had been long, the road hot and dusty. Night found us far from our intended camp, on the edge of the woods. This was not in our schedule. On their first trip all campers have a schedule. The darkness increasing so we could go no farther, we sought a shelter, reluctantly abandoning our schedule, which would have landed us in an abandoned house 2 miles farther on. Beside the road grew a thicket of evergreens. My camping book had told me that in an emergency such a place was excellent. It failed to state wherein the excellence consisted. Relying on that book, whose author I should like to meet, we halted for the night. Beneath the young hemlocks grew a luxuriant moss, and spreading our blankets on it, we prepared to sleep. After ½ hour we perceived that we were founded on a rock. We should have preferred sand.

Another fact began to make itself felt. The rock on which we lay sloped toward the road; a gentle slope, indeed, but sufficient for our discomfort, since at its foot was a puddle. When we felt the cold water percolating among our toes, we moved up. That operation we repeated 31 times before morning. As our time period was 15 minutes, I was able to tell the hour without consulting my watch. Time wore heavily on my soul, and the rock wore sorely on the nether portion of my trousers. Had I known the names of the stars, doubtless I should have passed the night addressing them personally, for they were many and beautiful. The æsthetic side of the situation did not, however, appeal strongly to me at the time. But as the Psalmist says, "Weeping may endure for a night, but joy cometh in the morning." After a substantial breakfast of cake, which we ate in order to save it, we shouldered our packs, brushed all the dew from the hemlocks down our backs, and, with appropriate remarks, pushed on.

After a few hours of tramping through the morning air, so refreshing after our night of torture, we came to a dilapidated sawmill village. There we hired a team and were jolted for 2 hours more, when we were deposited with our luggage close by an abandoned sugar house, where the trail entered the woods. "The jumping off place," our teamster, Jack Tinker, called it, and as he rattled homeward he turned for one last look at us, as though he feared we would really jump off. Late afternoon found us 5 miles in the woods, with a windfall covering over 100 acres before us. We could neither follow the trail nor pick it up again on the other side. Fortunately for us, we found a clearing at the left, and there we passed a comfortable night in the best preserved log shanty of a deserted lumber camp. Most of the buildings were wholly or partially in ruins.

Bears were the topic of conversation the next morning at breakfast, for during the night we had occasionally heard on the mountain side strange crashings and weird howls.

"Don't you fellows get scared of bears," said Tobias; "if we run across one, I'll take the gun and bore him plumb through." Fritz, my other companion, winked slyly but said nothing. To this day I fear he was the author of the weird howls.

At breakfast we enjoyed for the first and I trust the last time a new dish, which was the child of necessity. Our bread had been knocked to bits by the hard journey, and the only available way to use it was to fry it with pork in our new frypan. To our boyish eyes it almost seemed sacrilege to degrade our frypan, bought for frying sweet, toothsome trout, to this humbler duty, but we swallowed our pride and our breakfast. "Porcucere," we called the product, dignifying it with an aristocratic name, in which Latin scholars will perceive our attempt to combine the name of Ceres with *porcus*.

Armed with fishing rods and rifle my father had reluctantly allowed me to take, we started gaily down the brook which flowed past our camp and would lead us to Paul stream, the goal of our endeavors and the theme of many a merry liar. All day we followed the winding brook, angled the dark speckled trout from deep, shady pools, and put them in the basket by our side, tramped along abandoned lumber roads, through wild grass to our shoulders, and by mid-afternoon ate our dinner on the bank of Paul stream with a feeling of conquest and self sufficiency that might well be envied.

The darkening slopes of hills and mountains warned us to return. Expecting to move our camp to that place the following day, we set out. It was raspberry time, and now and then we passed through open places where bushes heavy with berries grew in profusion. Paths made by some clumsy animal passed through them at all angles, and the scent of crushed berries filled the air. "Bears eat 'rosberries,' " said Tobias; "perhaps we'll see one."

As we drew near our camp we were strangely silent. Perhaps some good angel sent us a presentiment of the danger ahead. What the others thought, I know not, but I was thinking of the noises of the previous night and of the crushed raspberries. How easy it would be for a bear to take possession of our camp and provisions. A night without supper and no breakfast! How hungry I felt! And then, suppose Bruin should prefer live meat to canned beans? Heaven forbid!

We emerged from the woods. O ye gods! There he was, his forepaws on the window sill, his huge head motionless, framed in the window like a picture of Satan. I handed the gun to Fritz. In his nerve and aim I had confidence. I opened my knife for use as a shell extractor and took a handful of cartridges. "We must be ready for a quick load," I muttered. For better observation, Tobias mounted the roof of an old stable near which we stood.

"Shoot steady and quick," I whispered, as Fritz swung the gun to his shoulder. Dead silence followed the sharp crack. In breathless anxiety we loaded and fired again. That time the bear moved; his head swayed from right to left and back.

"They always do that before they charge," whispered Fritz. "Let's give him another." And so we did; but no sign, no charge. I heard only a piece of loosened bark fall harmlessly from the roof of the old stable to my feet. On the ridge pole sat Tobias, doing service as a spectator. Suddenly he leaped to his feet and gave a yell of unbounded joy.

"Boys, it's only my old white-toed stockings that I hung in the window this morning to dry."

But his emotion was disastrous. The shaky old roof swayed, creaked, and broke. Down through the rotten boards went Tobias, his white face eclipsed by a cloud of flying shingles and dust. We dug him out, but reproached him not. We were too thankful that we had escaped "what might have been."

That night, when we went to the brook for water, we found in the sand one large track that had not been there in the morning. It had not been made by us, for we could not make another like it with the hand. Truly old Bruin had visited our camp in our absence, but preferred his diet of raspberries to the uncertainties of canned beans and young boys.

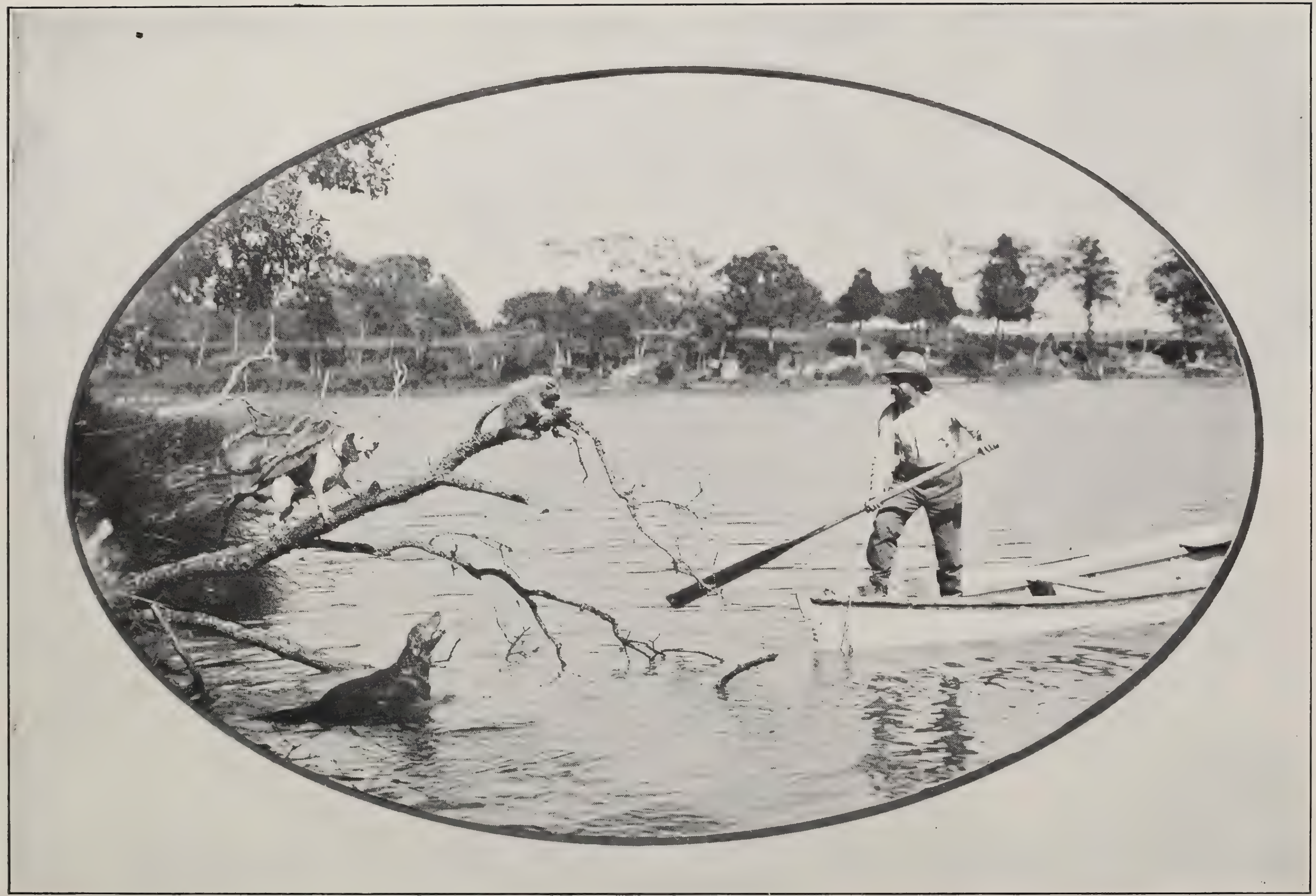
Do not scoff at my bear story. Most men have a bear story, but are they all as creditable to their chief actors as this of mine? Did I not act as a brave man should before a real bear? What matter, then, if after the trial was passed, the danger was found to be unreal?

One other fact I beg you to remember, the credit of which belongs wholly to Fritz. The 3 shots struck within a 2-inch circle between the eyes of the false-faced bear. Fritz fired from a distance of about 15 rods. You may be sure we were no nearer.

That night was our last in the woods. As the shadows of the mountains grew longer, and the sun went down in all the glories of a summer night, we ceased talking and listened to the melancholy evening song of the white throated sparrow. It made us homesick, too. We decided to move on the morrow and finish our outing at a small pond nearer civilization and farther from the haunts of bears.

Sniffles—We are gradually doing without things. We now have horseless carriages, smokeless powder, wireless telegraphy, and——

Biffles—Yes, and sunless springs, rainless summers and snowless winters.—New York Herald.



AMATEUR PHOTO BY J. E. TAYLOR.

BESIEGED.

Winner of 5th Prize in RECREATION's 6th Annual Photo Competition.

ON FORBIDDEN GROUND.

J. WILLS

In June, 1900, the little steamer "Tussler," 12 tons burden, left Ketchikan, Alaska, for home, coasting along Southern Alaska and down the peninsula as far as Dutch Harbor. Thence we went to St. George Island and lay to leeward for shelter. We went ashore, which is forbidden ground, and the blue foxes followed us like dogs. Six of them even followed me aboard the boat.

AMATEUR PHOTO BY JULIUS STERNBERG.

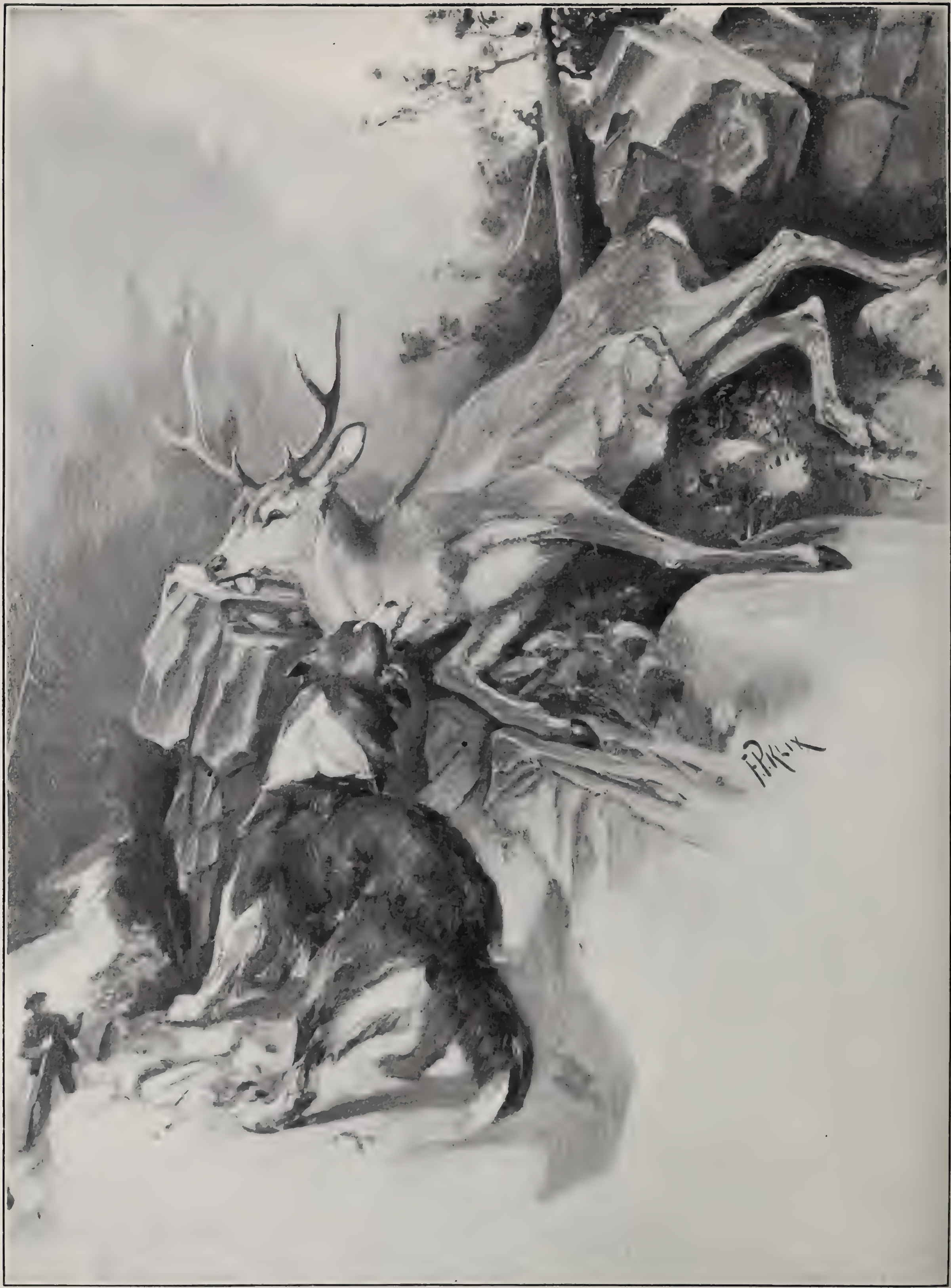
PATTERSON ISLAND BLUE FOX FARM. NEAR KETCHIKAN, ALASKA.

There are over 800 foxes on the island. Established 4 years. Original start comprised 25 foxes, males and females

St. George is one of the Pribiloff group which the North American Commercial Company has leased from the United States Government. The U. S. S. "Rush" came and dropped her hook alongside. That put a stop to going ashore any more, though we looked with longing eyes at the seal rookery.

Next morning we pulled out for St. Mathews, 235 miles Northwest by North, from St. George, and 475 miles from Dutch Harbor, arriving there after a 36 hours' run. We went ashore and filled our tank with fresh water. This island is uninhabited except by patch and white foxes and polar bears. We saw a few sandhill cranes, in a lagoon in the middle of the island.

After a stay of 8 days at St. Mathews, we pulled out for St. Lawrence, which is 175 miles Northeast by North. We had a hard trip, as the sea was mountain high, and the wind was fierce. Several times I thought the little steamer would never make the island, but she finally reached shelter behind Southeast Cape. The land runs back several miles, is low and full of fresh water lagoons. Thousands of emperor geese breed in those lagoons. With a Savage rifle I killed 7 geese and 2 white swans in one hour. With the exception of 2 geese all were shot through the head. I made one shot on the wing with solid point ball and got 3 geese. We could have killed hundreds of these birds and swans, but there being only 5 in our crew we had all we could use, and thanks to RECREATION, I have long since lost the desire to kill all in sight just for the sake of killing. Unfortunately we had no camera.



"BOB GIVE HIM A YANK WHICH STARTED HIM ROLLIN' AGAIN."

A DEER RETRIEVING DOG.

E. B. COLLINS.

Jake and me was runnin' a ranch up on Roane creek and we thought we could make somethin' out of the shootin', so we kinder give out over in Debeque that we could accommodate a few people what wanted to do some huntin'. The first folks what come 'long was a man and his wife. This kinder stumps my pardner, for he 'lowed things warn't fittin' and he didn't know just how to cook for lady folks; but it warn't long till they made Jake think everything was first class, for they didn't miss any meals and had no kicks comin'.

These folks didn't do much shootin'. The lady just killed a few ducks so as to have a change in the meat, as we only had venison. The gentleman he was after jack rabbits. When he would get a jack he would bring him to the ranch, skin him and cook all the meat off his bones; then set the bones all back in the places where they belonged, and just study them a long time. You see, he was one of them sculpter fellers what makes all kinds of animals out of mud and rock; and he makes them look like they was sure alive. He was larnin' how to make a jack rabbit.

Well, the next folks what come was 2 men from way back East what wanted to do some deer shootin'. I says to Jake, "These fellers just come out here to see how many they can kill, then go back home and blow about it and make their friends think they are great hunters; but it don't go with me. I'm the game warden for this here district and I'll just tell them the're allowed to kill only 2 deer apiece, and they better look for horns before they do too much killin'."

You see, does was plenty. They had come down off the high tops and was feedin' low down so you could just knock 'em over as easy as you could sheep in the pasture. But I didn't get no chance to say nothin' to them fellers 'bout this, for they just jumps out the wagon and tells their guide to look after the horses and their traps, as they was goin' up the gulch to look round before dark.

They comes back just as supper is ready and kinder makes theirselves known to the sculpter feller and his wife. When they sets down to supper they asks about the deer shootin' 'round there. The young feller he said he had come a long way to shoot a deer and was goin' to stay until he got one; said they had seen quite a number of does in the gulch just before dark, but as they were after horns they didn't do any shootin'. So I says to Jake, "I guess these fellers ain't no butchers, shootin' for some town market."

The next mornin' they gets up early, goes out and breaks the ice in the water bucket so as to wash. The young feller he just blows the water like he's skeered he'll get some on his face, and then he says he likes to wash in ice water. After they gets a good breakfast they starts up the gulch. I says, "Better take Bob 'long. He's good on deer, and if you wound one he'll keep on his trail till he rounds him."

They didn't seem to think much of Bob, as he was scraggly and not much for looks, part shepherd and the other part just dog, you know; but he begged so hard they whistled him along.

They comes back that night dead tired and hungry as bears; said they didn't know they had gone so far till they started back, but as they was well paid for the trip they didn't care 'bout bein' tired.

After they had their supper, the young one he starts to tell me 'bout Bob. He says, "Say, Ike, you know you got the best dog for deer that ever went over the hills after them. He don't only round 'em up, but he brings 'em to you. I killed a 200 pound buck this afternoon and Bob goes and fetches it right to me."

Now, you see I knowed Bob; he wouldn't weigh over 30 to 40 pounds, and when this young feller commenced to tell us 'bout bringin' him a 200 pound buck, I just thought 'twas time to call him off and ask him to explain, as I didn't want Bob's reputation hurt as a deer dog.

So he says, "Ike, 'twas this way: The buck was with a lot of does feedin' way low down the mountain, and when we come up he winded up and started for the rim rock. After he gets up there he had to circle round so as to get out. As he come my way, I commenced to pump lead after him, the third shot strikin' him just back of the shoulder and rangin' back. Down he went. He would try to get up and when down he would go again. I saw he was hard hit, so did no more shootin'. Bob was standin' by my side all the time, givin' little low whines and anxious to go after him, so I says, 'On Bob, bring him down.' Bob starts up, goin' round and round till he gets up on the rim rock, where the buck was. They had quite a scuffle, and the deer fell off the shelf as it were, and started to roll down the mountain. He lodged in some brush, but Bob come on after him, got hold and give him a yank which started him rollin' again. This was repeated till the deer was at my feet."

This explanation seemed to satisfy all the folks, so I told him I knowed Bob was an awful smart dog and I believed under certain conditions a 30 pound dog could retrieve a 200 pound deer.

ON THE TRAIL OF THE FOUR FOOTED LOCUST.

H. H. ROSE.

Early one warm morning in May we left Pasadena for a pedestrian trip to the high Sierras of Central California. Our party comprised my friend A. H. Conger, his son Harry, a strapping youth of 15, and me. Three burros laden with provisions and camping supplies constituted our outfit. We, roughly but comfortably clad, trudged behind.

Evening found us 12 miles out, thoroughly tired and willing to camp in any old place affording wood and water. Next morning an early start carried us across the wash of Big Tejunga canyon before the day grew excessively warm. Our camp the second night was near the San Fernando tunnel of the Southern Pacific railroad. The third day tried us severely. Hot, dusty roads, with a fierce head wind, made walking hard, and at 1 p. m. we camped in a green pasture on the Newhall ranch. About sundown Conger went shooting near camp, returning shortly with 7 fat young cottontails, giving us material for a fine stew.

Next day we pegged steadily upward through the Castaig canyon, leaving the wagon road to our right and taking a good mountain trail to Miller's ranch, at Oak Flat. There we camped under some fine oaks, but feed and water were scarce. That day was notable for the large coveys of quails seen along the road, the dry season seemingly having prevented them from pairing. The next 2 days we hunted and enjoyed the scenery.

From that point our route lay up the Piru. A short distance from where we struck the creek is a fine ranch owned by an eccentric English bachelor. Surrounded by his horses, cattle and bees he lives the life of a patriarch, barring howling children and scolding wives. Two miles farther up we made an early camp, as the threatening skies foretold rain. We remained until Monday morning, when we traveled Northward up the canyon, which broadens into a wide meadow at Bailey ranch. About 2 p. m. we cut into the main wagon road again, West of Necnach. I killed a large male glossy ibis, or bronze curlew. We camped for the night at Gorman's, on the old Fort Tejon road. Vast masses of black clouds rushed over the summits and poured through the pass, driven by a furious wind. The weather, to a Southern Californian, was fearfully cold, so after a hasty supper we crawled into our blankets, pulling the double folds of our tent over us.

Next day we made 18 miles down hill to Rose's station, passing through a grove of the largest and most stately oaks in California. Passing Castac lake, we reached the ruins of old Fort Tejon, an adobe structure built by the Mexicans to overawe the Indians. At the top of the pass, over 4,000 feet above sea level, I saw a flock of stilts circling over a cienaga. Hastily seizing the shot gun I ran to the fence and as they flew by gave them both barrels, dropping 6. Then Harry took the gun, and following them across the pasture secured 5 with one shot. Though not first class eating they made a palatable stew for supper.

From Rose's station to Granite station, through Bakersfield and Poso Bridge, the road passed over alkali flats and dreary barren hills, except in the irrigated district about Bakersfield.

The road Northward from Bakersfield leads over barren hills for 25 or 30 miles. The region was once carpeted with flowers and bush grasses, but the sheep, that "4-footed locust," as John Muir aptly terms him, has destroyed its beauty, and to a great extent its value. At Poso Bridge we found a few cottonwood trees in a dry, sandy wash. A well dug in the dry channel furnished water. Poso Bridge and Granite Station, 12 miles farther on, are just sheep shearing points, as many as 60,000 being shorn there semi-annually.

The Monday following we passed through Glenville, a pretty mountain village, and camped among pines and cedars at Burton's, 9 miles beyond. The next day we reached the end of the wagon road at Parson's mill. There we found a fine orchard, and bought some excellent apples. Steady plodding pulled us over the bald summit at the head of White river, and we camped in a deserted cabin at Tobias meadows, about 7,000 feet above sea level.

Off in the morning, we followed a good but rocky trail over high ridges and through dark canyons. We stopped for lunch at "Dirty camp," where years of sheep folding have covered the slopes with droppings and given the place its name. We camped for the night beside a fine stream at Dry meadows, where countless sheep ba-a-a-ed all night. At least 200,000 sheep are now trespassing on the National Forest Reserve in these mountains, doing enormous damage to young trees and shrubs and incidentally to the water supply.

June 1st we reached Kern lake. This is a widening of Big Kern river and was formed in 1868 by a landslide occasioned by the great earthquake. Much timber is still standing half submerged. The lake abounds in gamy trout of great size. Ordinary tackle is far too light, and though we hooked many fish we brought but few to book. The largest one taken I landed after a 35 minute struggle. He measured 22 inches and would have weighed 4½ to 5 pounds. There are many larger ones in the lake, some 30 inches long having been taken.

We obtained saddle horses for a trip up Whitney creek, which heads high on Mt. Whitney, and is the home of the famous golden trout. They are found only in that and tributary streams. Light golden yellow, heavily striped with carmine and with bright carmine bellies, they are wonderfully beautiful. We caught many.

On the trip Conger saw a female canvasback duck fly into a hole 30 feet from the ground in a big pine stub. As it was the breeding season she doubtless had her nest there. I never before knew any of our ducks nested in hollow trees, except the wood duck, fulvous duck, and occasionally the merganser. We surprised an old merganser with her brood one morning and it was amusing to see the fluffy little rascals clamber on their mother's back as she paddled rapidly down stream.

Leaving Kern lake June 12, we made Little Kern crossing that day. The next day we took the Jordan trail to Camp Nelson, on a branch of the Middle Tule river, reaching there at the close of the second day. We renewed supplies and went leisurely down the river to Portersville, stopping 2 days at the house of the Porterville fishing club, where we were cordially received. At that point we sold our outfit, and taking the train, reached home the next day, bronzed, tough and hearty.

AMATEUR PHOTO BY GEO. G. CANTWELL.

A KLONDYKE SUN EFFECT.

John Smith, of Mars—Tesla seems to be sanguine that he will be successful in communicating with the people of the Earth.

William Jones, of Mars—I wonder if the Earth has a Tesla, too?—Life.

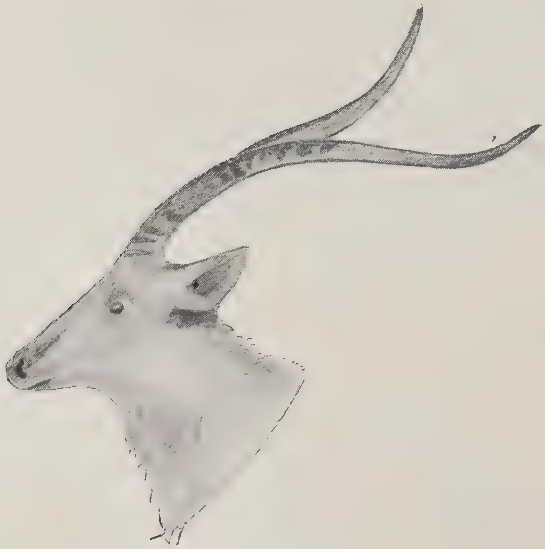
IS THERE AN IBEX IN THIS COUNTRY?

For 20 years past I have been hearing rumors and reading newspaper accounts of the appearance of so-called ibex in Idaho, Montana, Oregon, Washington or British Columbia. I have always regarded these stories as pipe dreams and have run down several of them. In each case where it had been claimed that the ibex had been killed the specimen proved on examination either a female mountain sheep or a white goat.

The region in which it is claimed the ibex has been found has been worked over by fur traders and trappers for 200 years, and if there were such an animal there some one of those trappers, or some sportsman or naturalist, would surely have taken a specimen and it would have found its way into some museum.

Here is a letter that reads more like fact, more like the report of a careful observer, than any ibex story that has ever come to my notice:

> Tacoma, Wash., Nov. 12, 1901.
>
> In May, 1900, I was staying in the Crow's Nest pass, Canadian Rockies. One evening while going along the railroad track 2 animals came down from the mountain side to the track. They would have weighed about 160 to 180 pounds each. The color was ashy gray. The hair on the back was about 6 inches long and stood up, forming a black line from the back of the head to the tail. The under side was a little lighter color. Legs were of medium length. The horns were about 3 feet long, beautifully black, curved back and a little outward. I was within 15 yards of them and had a good look at them. I believe they were ibex. I send you a drawing of the head of one, made while looking at them. I hunted for them a week or so after that, but never saw them again.
>
> A rancher in Alberta told me that in old times when he lived in Oregon he saw several of these animals, which he called antelope. He recognized the drawing instantly as of the same animal.
>
> John F. Almon.



IS IT AN IBEX?

Could these have been the descendants of some domestic goats that were liberated years ago? Or is there really a species of ibex indigenous to the Northwest? Who can tell?—EDITOR.

AMATEUR PHOTO BY JULIUS STERNBERG.

TUG OF WAR AT KETCHIKAN, ALASKA, JULY 4TH.

Indians vs. Whites. Declared a draw after 2 hours and 15 minutes.

BOIL IT DOWN.

Joe Lincoln, in L. A. W. Bulletin.

If you have a thought that's happy,
Make it short and crisp and snappy.
When your brain its coin has minted,
Down the page your pen has sprinted,
If you want your effort printed,
Boil it down.

Take out every surplus letter,—
Fewer syllables the better,—
Make your meaning plain,—express it
So we'll know, not merely guess it.
Then, my friend, ere you address it,
Boil it down.

Boil out all the extra trimmings,—
Skim it well, then skim the skimmings,—
When you're sure 't would be a sin to
Cut another sentence into,
Send it on, and *we'll* begin to
Boil it down.

Reprinted from March, 1901 RECREATION.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman

MORE LIGHT ON BABCOCK.

From the following correspondence it seems Babcock's neighbors had not understood his practices. Now, however, they have no further doubts of his swinishness:

Santa Barbara, Cal.

Mr. G. O. Shields, New York:

Dear Sir—I have heard a different version of the 2,000 birds a day story from the one you have printed, and I should like to ask if you are positive in your information. In this country we are bothered to death with mud hens, as we call them, a species of coot, that gather on our duck ponds and destroy great quantities of the food the ducks seek. These birds come in countless numbers and are very annoying. I have heard it was these birds that were killed on Otay lake. I saw the account in a local paper of 2,000 being killed one day and 1,000 another day, but have always understood the birds killed were mud hens. If they were ducks I should be willing to brand the killers with a much worse name than game hog, but if I am correct in my surmise I should say they did right. I am a member of a club that has a fine lake in this county, preserved, where we used to get good shooting, but for the last 2 or 3 years these mud hens come in such numbers as to render shooting almost impossible, and by quickly devouring the natural feed they soon drive the ducks away. We are even now planning some such battues as we understood the Otay lake people used, to rid ourselves of the pests. In shooting over the lake last winter I would often kill 3 or 4 of these mud hens at a single discharge of my gun in shooting at ducks that got up in front of my boat. If you happen to see in the local papers of this section of the country that the members of the Guadalupe Duck Club have killed 16,000 ducks in one day on their preserve don't dish us up. They will have been only mud hens.

Seriously, I think the new game laws just passed by our Legislature will stop a great deal of this kind of outrageous killing of game. The bag limit, or prohibiting the possession of more than the bag limit, is a fine thing. It will practically stop shooting for market, as the pot hunter can not afford to give up his other work and go hunting when he can only kill 50 ducks in one day. Besides this, we can get at the marketman for having in his possession more than the number. I should be pleased to have your authority for the Otay lake story. E. C. Tallant.

ANSWER.

I am glad to have your frank and manly questions and suggestions. I am aware that Babcock and his outfit killed a great many mud hens in order to get rid of them, and while I do not at all admit the justice of this, it is not the killing I complain of. For 3 or 4 years past Babcock and his friends, sailing under the name of the Otay Gun Club, have been making records on ducks. Not only this, but they have been employing professional photographers in many instances to record their slaughter. A friend of mine who recently spent a week at Babcock's hotel tells me he has a large album on a desk in the office almost filled with these duck hog pictures. He says the photos show stacks of ducks on the ground, wagons loaded with ducks, and at least one man standing in front of the camera, completely covered with strings of ducks except his head. The birds shown in this album are not mud hens, but ducks of various species. I am told that the negatives of these pictures are promptly destroyed, or carefully preserved by Babcock, in order that no stray copies of them may get into the hands of people who might be inclined to use them in educational work.

I seriously doubt the wisdom of your proposed match on mud hens. These are in the main harmless birds, and they are almost the only specimens of bird life that remain in the vicinity of small lakes and ponds in various portions of the country. They should therefore be spared for the interest and entertainment of the people at large, even though they may become a nuisance in certain localities. I do not mean to say that you would deserve any serious condemnation if you did kill a few hundred of these birds, but still I am inclined to think it would be wrong for the general public.—Editor.

Santa Barbara, Cal.

Mr. G. O. Shields:

Dear Sir—Have read your favor of the 1st with great interest. What you write me about Babcock puts a very different aspect on him from what we have generally conceived him to be. We had heard the 2,000 birds in one day story, and we had heard they were mud hens, destroyed to rid the shooting preserve of them; hence we did not attach any importance to the other stories. We have been so troubled with these mud hens that we can sympathize with anyone who destroys them, but we do not countenance any killing of game for the purpose of making a record. In our duck club we limit our members and guests to 25 in any one day and do not permit the selling of any game killed on the lake we control. In fact, the present game laws of our State, just passed, were framed at a convention held in San Francisco, of which I was a member; and other members of our club were greatly instrumental in getting the law passed by the Legislature and signed by the Governor. We have our county well in hand in the matter of game protection and do not have many violations of our game laws.

The matter of the mud hens is becoming serious. Every year shows a big increase in the number of them and a correspondingly short period when ducks stay on the lake. It is evident the mud hens eat of the food of the ducks and the latter are soon compelled to seek other quarters. You can not imagine the numbers of mud hens that can be seen in the winter on our lake. They must be seen to be appreciated, and unless we begin to destroy them we will have to give up the lake as a ducking ground. Every year shows a great reduction in the number of ducks that visit the lake. What proves to me that I am right about the mud hens eating the food and forcing the ducks to leave is the fact that the mud hens leave when the ducks do, showing beyond a doubt that the food is exhausted.

E. C. Tallant.

OTHERS PROMISE TO RESTRAIN INDIANS.

Following are further copies of replies to the circular I sent the Indian agents of the United States:

Fort Berthold Agency, Elbowoods, N. D.
Mr. G. O. Shields, New York:

The protection of game on this reservation receives constant attention. As you are aware, the game laws of North Dakota require that hunters obtain a license to shoot game of any description and restrict the manner of killing to a gun held at the shoulder. It is a pleasure to be able to state that the majority of the Indians belonging on the Fort Berthold reservation, who do any hunting, apply annually for hunters' licenses. While they can not be prevented by law from killing game on their own reservation, we have by example and persuasion done much toward influencing them to comply with the law. As for killing game off the reservation, they do not at any time now kill antelope. Deer are killed by them only in season.

The game laws are violated by some of the whites in the vicinity of the reservation oftener than by the Indians. Some of these white men utterly disregard the law and kill deer at all times of the year. Large game has nearly disappeared from this part of North Dakota. Antelope are rarely seen now, and deer, once to be found in every thicket along the Missouri river, are found only at a few points where the undergrowth is almost impenetrable to man. Two years ago 2 bighorns were killed in the badlands of the Little Missouri river, but they were probably the last in that part of the country, as none have been seen since. Frequent rumors are heard of bear being seen in the Little Missouri country, but I doubt their reliability. A bear was, however, killed there a little over a year ago by a small party of cowboys. Beaver are nearly extinct, but even the few remaining are not safe from some vandal if seen. Birds are plentiful. Brant and several species of ducks have large breeding places on the reservation. Prairie chickens make their home here the year around. It is probable there will be a large decrease in the number of chickens the coming winter on account of the loss of native fruits, owing to late spring frosts. During the latter part of September several chickens which I killed had their crops full of grubs, etc., something I had never seen before. This was due to the scarcity of buffalo or bull-berries, on which they usually feed.

You are again assured that all due steps are taken for the protection of game on the reservation. If the game wardens off the reservation were more numerous, or attended more strictly to their duties, some of the violators of hogs might be taught a lesson they would remember.

Walker Lee, Agency Clerk.

Jocko, Flathead Agency, Mont.
Mr. G. O. Shields, New York:

Under the treaty of 1855 with the Indians of this reservation, they retained the right to hunt and fish on all lands of public domain, with the same privileges as the whites. These Indians are generally law abiding and wish and undertake to respect the stringent game laws of this State. I have made it a point in the past, when the Indians are leaving the reservation for the annual hunt, to inform them of the game laws and to urge on them the necessity for observing same. There is little complaint in this section of the country against our Indians, as the laws are generally observed. I am in full sympathy with your work. As agent of these Indians and personally I do all in my power to preserve the game of this region, and shall be pleased to give you, at any time, all possible aid in your work.

W. H. Smead,
U. S. Indian Agent.

Klamath Agency, Oregon.
Mr. G. O. Shields, New York:

I am pleased to be able to say that I am in hearty accord with your work and that my influence has always been in the interest of game protection. Born in Oregon, brought up in the wilderness, experienced as a hunter and scout, and long identified with the Indian Service, I have had ample opportunities to realize how merciless our people have been in the slaughter of the thousands of splendid game animals which inhabited the mountains and plains of the Pacific coast. You may rest assured I am doing much work toward securing the observance of the forestry and game laws on the part of the Indians under my charge.

With ardent wishes for the success of your important work, I remain,

O. C. Applegate, U. S. Indian Agent.

Colville Agency, Miles, Wash.

Mr. G. O. Shields, New York:

I fully agree with you in what you say with reference to the destruction of game, both by Indians and whites. I will, in every way I can, assist you and co-operate with you, and will see to it that the Indians under my charge observe the laws of this State. The permit system in vogue among the Indians is a pernicious one, and has been considerably curtailed at this agency during the last few years.

Albert M. Anderson,
U. S. Indian Agent.

Jicarilla Agency, Dulce, N. M.

Mr. G. O. Shields, New York:

I will gladly assist in seeing that the game laws of New Mexico are enforced. I have already taken up the matter with the Indians, and they fully understand the laws of the Territory.

A. S. Walpole,
U. S. Indian Agent.

GAME PROTECTION IN THE SOUDAN.

W. T. HORNADAY.

Englishmen are not only first class sportsmen, but they are also model game protectors. They go on the principle that the way to protect game is to protect it; and the lavish manner in which they lay down laws and prescribe stiff penalties is enough to excite a degree of admiration amounting to envy.

Year before last Rhodesia began to protect its game. Last October the Anglo-Egyptian government of the Soudan adopted a set of game laws and regulations that may well serve us as a model for Alaska. The official pamphlet, "Notes for Travelers and Sportsmen," tells sportsmen where the Soudan is located, how to reach it, how to live and hunt in it, how to get away from it by the shortest routes, and what everything, save courage, costs in hard cash. Incidentally, there is added a postscript about hunting licenses and the cost thereof, and a warning of the official inspection of all trophies that awaits the hunter on his return to civilization.

Khartoum is now easily reached by steamer and rail; from December to March the Soudan government runs comfortably fitted tourist steamers between Shellal and Halfa, on the Nile; and "2 trains *de luxe*, with dust proof sleeping and dining cars, fitted with electric lights and electric ventilators," run between Halfa and Khartoum. Think of palace cars now in Khartoum! If you wish to send a money order to El Obeid, or telegraph to Goz Abu Guma, all you need, to accomplish either, is the price. As a civilizer and developer of wild and lawless countries, England is a world beater; and may her power and provinces never grow less!

Nine species of wild animals and birds may not be hunted, killed nor captured in the Soudan. They are the chimpanzee, eland, giraffe, rhinoceros, zebra, wild ass, ground hornbill, secretary bird, boat-billed heron.

Under an "A" license, costing 25 pounds sterling, 13 species of large mammals may be killed or captured, 2 to 6 of each, up to a possible total of 51 head. These are the hartbeest, 2 species of waterbuck, 2 species of cob antelope, the reedbuck, gazelle, roan antelope, 2 species of oryx, the addax, bushbuck and kudu. In addition to the above, 2 specimens each of flamingo, pelican, spoonbill, crowned crane, stork, heron, egret and hammerhead may be killed or captured.

Any sportsman who desires only 5 pounds' worth of license is furnished with one at that figure, marked "B," under which he may kill 10 each of wild sheep, ibex, wart hog, bustard and various antelopes and gazelles.

But there is a joker in the pack. Under appendix "H" is a list of export taxes on specimens, "living or dead, or parts of specimens," which is calculated to make every live animal catcher in the Soudan think hard. The skins of most creatures are free of export duty, but the exporters of live animals will hereafter pay through the nose. With all the chances of death to face, these are some of the export duties:

On each chimpanzee, giraffe, hippo, wild ass, buffalo or zebra, $125. On each elephant or rhinoceros, $250, and on most other hoofed animals worth having, $10 each.

Clearly the Soudan government regards its wild animals as a valuable treasury asset, and proposes to derive some benefit from their withdrawal, by death or by capture alive. The trophies brought out by sportsmen or travelers are all carefully inspected by the government officers, at points of departure, and if any penalties are payable, they are demanded then and there. Furthermore, "sportsmen, on returning from their shooting trips, must furnish the Superintendent of the Wild Animal Department at Khartoum with a complete and detailed list of all animals shot."

Besides the shooting regulations imposed generally throughout the Sudan, a large "officers' game reserve" has been created, in which the animal life is absolutely protected at all times, save when hunted by officers of the army of occupation, or officers of the Soudan government. At this distance such a game preserve seems a commendable feature; but if we were there, a down-trodden holder of a "B" license, in a poor country for game, on the Eastern bank of the Blue Nile, we should be likely to feel that the officers' preserve is a great iniquity, and an infringement on the sovereign rights of the people. Were we compelled by cruel fate to live in the Sudan a term of years, we should be likely to feel that the preserve, and the right to shoot in it, constituted only slight compensation for our years of exile.

In view of the way game slaughter is now proceeding in Alaska, it is truly invigorating to see how Englishmen have grappled with the subject of protection in the wildest part of Africa. Surely we should be able to do as well in Alaska.

OUR LUCK IN FLORIDA.

Lexington, Va.

Editor Recreation:

Last winter 6 of us went to Kissimmee island, Florida, resolved to secure game or perish in the attempt. We carried 10 days' rations. After 3 days' tiresome traveling we camped on a big slough known as the Morgan Holes.

An hour before reaching our camping place 2 of the party got out of the wagons with their rifles, intending to take a circuit through the cypress and meet us at camp. Fifteen minutes after they had left we heard firing from their direction. We went on, and as 2 or 3 of us were young veterans of the Spanish-American war, we soon had our tents up and wagons unloaded.

The 2 hunters presently came in, but they had killed nothing. They had walked up 5 deer and had made 30 clear misses.

While at supper it began to rain and in 2 minutes our tents were flooded. We then moved camp 2 miles farther, to a good dry place, built a fire and finished our supper. Ordering the cook to have breakfast at daylight we turned in.

I awoke next morning at 7 and found the cook dead asleep. We got breakfast about 9 and then started hunting in pairs, Jim and I together. After chasing unsuccessfully a flock of turkeys, we saw a large pair of antlers approaching. We crouched behind a bunch of sawgrass and pretty soon the buck came in sight, walking directly toward us, only 200 yards away. Just then I took a violent chill. He came steadily on until within easy range, then winding us he started off. Our rifles rang out simultaneously and he fell. We walked up, prepared to bleed him. Jim was feeling for the artery when the deer sprang to his feet. Jim grabbed him as he got up, and a more superb exhibit of kicking down and dragging out I've never seen. Jim yelled to me to shoot, but I dared not for fear of hitting him. Besides, I had no time to shoot. I was busy laughing.

The buck finally kicked Jim loose and ran into a small cypress pond a half mile away. After getting a good cussing from Jim, who said I had acted like a d—n fool, we went to the pond. The buck came out, and 3 more bullets in vital spots downed him for good.

We bled him and hung him up to be hauled into camp with a wagon. We then turned homeward, getting to camp about 4 o'clock. The others of the party came back empty-handed, though all had seen game.

Presently a middle-aged Indian walked up, and with customary "How?" shook hands all around; and with his limited English and our more limited Seminole we were soon in conversation. He, too, had been hunting, and was returning to his camp; seeing our fire he thought he would pay us a call. He had eaten no supper, and we ordered the cook to prepare him some. After a hearty supper and a heartier drink he picked up a small doe he had killed and prepared to leave. We made him a present of a quart of "66" and he left highly pleased with our hospitality.

The next morning dawned cold and clear. Knox decided to go with me, and as the cook wished to try his luck we permitted him to go with us. After tramping 4 or 5 hours we started back toward camp without finding game.

Two miles from camp a fox jumped in front of us and Knox shot him. At the report 2 bucks sprang up about 250 yards away. Knox and I opened on them, but they were too far away. During the excitement the cook got 100 yards ahead, the dog following him. Glancing in his direction we saw the dog pointing. The pot slinger blundered up and 8 or 10 turkeys ran out, looking as big as ostriches. We used our rifles unsuccessfully at 150 yards.

On our return to camp we found each of the other boys had game. As that was Saturday we rested over Sunday, and at daylight Monday we started for home, which we reached Tuesday night.

A. W. M.

AN ANTIQUE SPECIMEN.

Mr. J. E. Pratt, Chief Warden of the Michigan Division of the League, sent me a letter he recently received, and which I print verbatim:

Conneaut Ohio
Oct 8thee 1901

J. Elmer. Pratt
Dear Sir

dear Sir I take this opertunety to right asking you a few questions in regard to the gaim laws of mishigan the first is what is the law in regards to a foren hunter or from a nother state now I see in the news papers all kinds of laws now I see that wee can pay our $25 and kill 3 deer but not sell eny nor take eny out of the state now what are wee to do with what wee cant eat now I halve hunted on the northen pensley for the last 18 years and halve paid the licens ever since it has bin leveid on ous out of the state but halve sold any extry venson all but twise I tride to fetch ham of venson home in my trunk two falls and had my trunk broken open and that little taken out that I tride to fetch home to my famley to halve a tast but failed now I halve hunted for the last fifty five years and still wants to halve a little hunt yet but dont no what to do with my venson when I git it as I see the law I will halve to let it lay and rot now is there no way of giting a per mit I want to hunt and I want to live up to the law now I go to Seney there I halve got my licens every year hoping to hear from you soon

Respectfuly
yours
F. B. Blood

F. B. Blood
conneaut
ohio

Mr. Blood is a specimen of the old time, backwoods, chin whiskered deer hunter. I have seen hundreds of them going to and coming from the Michigan and Wisconsin woods, and have encountered some of them while hunting in that country. They usually go in gangs of 10 to 20. Each man carries a roll of old quilts of the vintage of about '47, and the party carries several boxes of groceries, bacon, potatoes and other truck, done up in job lots and checked through as baggage. They are armed mostly with old time, long barrel, muzzle loading rifles, and carry with them ample supplies of powder, bullets, caps and even patches. When they land at the station where they leave the train they immediately look up some farmer or woodsman to haul their truck to the camp grounds and the men hoof it. They employ no guides and so do not leave one dollar a head in the country where they hunt, except for hunting licenses; and every officer who issues these licenses knows that it breaks the heart of every one of these old backwoodsmen to put up $25 or any smaller sum for a hunting permit. Such men find no more pleasure in hunting than a cow does in grand opera. They care nothing for the beauties of the forest, the singing of the wind in the pine trees, the song of the birds or the capers of the red squirrel, than a hog does for art. All these men want is to kill, and if perchance any one of them fails on a single trip to kill to the limit he feels he is disgraced forever. On the contrary, the man who first reaches the limit is king of the band. It is gall and wormwood to all such hunters that they can not be allowed to sell their game in order to pay their railroad fare to and from the hunting grounds. Mr. Blood is well named, and if he could only be induced to shed himself instead of the blood of the 3 deer per annum now allowed by the Michigan laws, it would be a good thing for the game interests in that State.—EDITOR.

DESERVES TO BE GOVERNOR.

> Messrs. I. E. O. Pace, an attorney; T. Curran and J. S. Hammond, employes of the Jefferson Valley Trading Company; and Fred Warren, an employe of James Williams, of Whitehall, killed ducks on the 25th of August, which was before the open season had begun, on the presumption that the law did not mention them; but the version of the attorney-general has been that the old law held as to ducks, and it was thereafter illegal to kill them before September 1st. The game warden learned of the infraction and had a complaint lodged against the men. A hearing was had before Justice Cooley, of Whitehall, and he discharged the defendants. The game warden and county officers were then at work on the case, and the parties had a hearing before Justice Sweet, in Boulder. They pleaded the constitutional provision that they could not be twice placed in jeopardy for the same offense, so when their attorney moved for a dismissal, County Attorney Murphy acquiesced and it was done. The attorney-general didn't like the way things were manoeuvred, so he had a new information filed, on the theory that defendants had been on trial and acquitted for killing one duck, and there were 14 ducks yet to answer for. The parties were again arraigned before Justice Sweet, Attorney Balliett, of Helena, for Defendant Pace; Attorney Herron, of Butte, for the others. The prosecution was looked after by Mr. Mettler, assistant attorney-general; County Attorney Murphy and Game Warden Scott. After a conference Mr. Pace pleaded guilty and was fined $100 and costs. For the others the first effort was to establish that they could not again be placed on trial for the same offense, but the justice held that this was another duck, and the case proceeded. The principal witness for the State was Sully French, of Whitehall, and the killing of ducks out of season was established. The justice found the defendants guilty and fined them $25 each and costs. This will no doubt have a good effect on the law breakers, as heretofore little attention, if any, has been paid to infractions of the game law in this county.

Here is an attorney-general who deserves the hearty admiration and commendation of every friend of game protection in the

United States. It is rare indeed that we can find a man in such a position who is willing to take up violation of the game or fish law and push it to a finish, as the attorney-general in Montana has done in this case, and when we do find such a man, it makes every friend of game protection feel like throwing up his hat and shouting. The attorney-general of Montana deserves to be governor of the State. If he ever decides to seek that office, he has only to remind the sportsmen of that State of his action in this case, and they will do the rest. I am willing to bet on this.—Editor.

GAME LAWS BENEFIT FARMERS.

Mr. Z. T. Sweeney, State Game and Fish Commissioner of Indiana, in his annual report to the Governor says:

> "Until within the last few years the opinion generally prevailed among our citizens that game and fish laws were for the benefit of the rich. This is now conceded to be a mistake. The rich man can have his sport whether there is protection in his locality or not, for he is not confined to it, but the whole country is open to him as a sporting ground. If game and fish are scarce in a neighborhood, he has but to step on a train and in a few hours be transported to a country where they are plentiful; but the poor man and the man of average means, who have to work from month to month, have no such opportunity, and unless they can find game and fish in their own locality they are practically cut off from hunting and fishing. The people now see clearly that the protection of game and fish is in the interest of the average man rather than the rich man. In reality the non-protection of game is for the benefit of the wealthy man, the game dealer and the market hunter, while protection is in the interest of the man of moderate means.

It would simplify the problem of game protection greatly if farmers and other laboring men could be convinced of the truth of what Mr. Sweeney has said. There is a well defined prejudice existing, in the minds of farmers especially, all over the country, against the men they term city sportsmen, dudes, etc. The farmers persist in saying and believing that game laws are made solely in the interest of these men; but such is not the case. Game laws are for everybody, and the great majority of law makers invariably consider the interests of their agricultural constituents carefully when they form and pass laws for the protection of game and fish. One remedy for such a state of affairs would be for city sportsmen to lease from farmers the shooting privileges on their lands, paying a small price per acre per year therefor. If this plan were generally adopted the farmers would then consider the game one of their valuable crops and would protect it in so far as possible from the depredations of pot hunters. All true sportsmen should consider this proposition carefully. The plan has already been adopted in many instances with good effect, and it should take generally.—Editor.

DEFENDS MICHIGAN MEN.

I note, with regret, in October Recreation, the remarks of E. E. Stokes, on Michigan hunting. I have hunted deer in Michigan 15 years, and I have never known or heard of such conditions as he describes. No doubt there are many violators of game laws in Michigan, but my experience has taught me that hunters from other States have far less regard for Michigan laws than resident sportsmen.

Mr. Stokes laments that more hunters were not killed, and says of the 12 unfortunates who met death in the woods that they were "probably worth less than one deer." In all human probability he knew not one of the 12, certainly not all of them, and his rash judgment in that matter discredits the rest of his conclusions.

I, of course, am not prepared to say that his statements as to the number of deer illegally killed in his vicinity are untrue, but I can not believe that of 5-6ths of the deer shot many were fawns in the spotted coat. It is possible to find a fawn in the spotted coat in the fall, but to say that many of the deer killed at that season were spotted fawns is absurd.

Even if all his statements were true, I regret that he should have published them. Thousands of hunters read Recreation, and some, no doubt, will conclude from his article that anyone can come to Michigan, hunt regardless of law, and not be molested. Mr. Stokes would have done better had he laid his information before the game officers of our State, who could, and no doubt would, have brought the guilty parties to justice.

I am a subscriber to Recreation, and heartily indorse its good work, but I believe if we all would give information to the wardens, instead of advertising the localities where violations go unpunished, we would be doing more to save our wild friends in the woods.

Rufus F. Skeels, Hart, Mich.

AMENABLE TO STATE GAME LAWS.

The game laws of Vermont allow deer to be hunted the last 10 days of October. Can deer be shot out of season on a Government Military Reservation by an officer of the U. S. Army?

Harold M. Hone, Northfield, Vt.

ANSWER.

Military reservations are governed under regulations of the Secretary of War, and in absence of express provisions in the regulations for privileges of this kind, deer or other game can not be killed during the close seasons established by States in which such reservations are situated. The law governing the case is as follows:

30 Statutes at Large, p. 717.

Chapter 576. An act to protect the harbor defenses and fortifications constructed or used by the United States from malicious injury, and for other purposes.

Section 2. That when any offense is committed in any place, jurisdiction over which has been retained by the United States or ceded to it by a State, or which has been purchased with the consent of a State for the erection of a fort, magazine, arsenal, dockyard, or other needful building or structure, the punishment for which offense is not provided for by any law of the United States, the person committing such offense shall, upon conviction in a circuit or district court of the United States for the district in which the offense was committed, be liable to and receive the same punishment as the laws of the State in which such place is situated now provide for the like offense when committed within the jurisdiction of such State, and the said courts are hereby vested with jurisdiction for such purpose, and no subsequent repeal of any such State law shall affect any such prosecution.

Approved July 7, 1898.

A POLICE RAKE-OFF.

During the past week the officers in the city hall have been living on a duck diet. Captain Everts returned from a 3 days' trip, and although he hunted only an hour or 2 he recovered 57 ducks, which he distributed with lavish hands. W. E. Winn, clerk of the police court, returned from a 5 days' trip to Market lake and brought 82 ducks. He said he lost several hundred because he had no dog with him.

Winn says the ducks were so thick he could not see the sun on cloudy days, and in one shot he succeeded in killing 17 birds that he knew of. He might have killed more with the same shot, but he did not succeed in finding them.

Several policemen have signified their intention of taking a few days' vacation and are listing the number of birds they will have to distribute on their return.—Butte (Mont.) Miner.

I wrote Captain Everts, asking if the foregoing report was true, and he replied:

You were correctly informed about my killing 57 ducks. I was not over 2 hours in doing it. Could have done better if I had had a water dog to retrieve the wounded birds. If you have a good water spaniel or Chesapeake pup for which you have no use, just ship him to me at my expense and I will be thankful. Then, if you visit Butte during the duck season, call on me and I will show you how it is done. I remain yours respectfully, hoping you send me a nice thoroughbred dog pup.

Ed. B. Everts, Captain of Police,
Butte, Mont.

I am glad you haven't a dog that will help you out in your miserable and contemptible slaughter of ducks. If I had a hundred I would not sell you one, even if you should offer me $1,000 for it. I would rather send you a vicious bull pup that had been inoculated with hydrophobia so that he might chew you awhile and put you in such shape that the authorities would have to lock you up for the remainder of your life.—Editor.

DID NOT BREAK THE LAW.

I am severely criticised by my friends for the article in November Recreation which makes me out a game law violator. Of course, you understand that the article "An Hour in the Woods" was written in '99, describes a '98 hunt, and has been in your office ever since. The game laws have been changed since '98, and the beginning of the article, "Last fall I was one of," are the words that convey to the minds of readers the idea that I, a warden of the L. A. S., unlawfully killed a grouse and a squirrel. If you had put the article in print at the time I sent it to you, it would have been all right, as it was lawful to kill squirrels and grouse at that time. Now if you wish to do me justice, please state the situation to your readers.

N. H. Covert, Beaver Falls, Pa.

It is true I held Mr. Covert's MS. in my office 2 or 3 years before printing it, and I should have changed the first line to read, "In the fall of '98." I trust this, with Mr. Covert's explanation, may set him right in the eyes of all readers of Recreation.—Editor.

FOR A SMALLER LICENSE FEE.

The practice adopted by some States of charging non-residents a high fee for the privilege of hunting within their boundaries will, I think, meet with more and more disfavor as time goes on. Many sportsmen can not afford to pay $25 or $40 for a few weeks' hunting, yet, in this free country, they are as much entitled to a share of sport as are their wealthier fellows. Moreover, when a man has paid a big license fee, he is likely to recoup by killing all he can. Under a license law it is harder to interest the farmers in game protection; they think the rich man has already too many special privileges. If this thing continues the poor will turn poachers and get their share despite the law. It would be wiser and more fair to exact a small fee, say $5, from residents and non-residents alike, and devote the money to the protection and propagation of game.

J. H. Fisher, Jr., Baltimore, Md.

CAMP COOKERY.

You ask for some good recipes for camp cooking. Here is what I call "camp delight": Dig a hole 3 feet in diameter, 2 1-2 feet deep, and prepare enough small logs and chips to fill the hole with hot embers. Slice bacon as thin as possible and place a layer over the bottom and around the sides of a Dutch oven about 12 inches in diameter. Slice venison medium thin and put in to the depth of 2 1-2 inches, salting each layer. Chop a large onion and sprinkle over the top, cover with another layer of bacon and one pint of water and put on the lid. Fill the hole half full of hot embers, place the Dutch oven in the center and fill the hole rounding full of embers. Cover all with about 6 inches of dirt and go to bed. Next morning dig in.

W. H. Long, Walden, Colo.

GAME NOTES.

I saw in November RECREATION your comment on the tender of a lumber camp having to take to a tree to keep away from an elk. I do not know much about elk in the woods, but for the next 3 months I don't think you would care to go into W. C. Whitney's elk pasture without having a tree handy, for the old bulls are ready for business every time. Whitney's place is about 8 miles from my place, and the last time I was there was in August. I took snap shots at some of the elk. There are about 100 altogether. He also has about 20 buffalo and 20 or more blacktail deer. When I was there the buffalo and deer were in the woods, it being hot weather.

W. T. Cross. Becket, Mass.

Game protection in this State has made great success recently. An association has been formed in Los Angeles county, and it has done some good work so far. Other associations have been formed in other counties, among them Orange and San Joaquin. I was much pleased to see the League signs along the trails while on a trip to the West Fork last summer. The general attitude of the mountaineers seems to be against the hog, and while they kill some game out of season they rarely kill a doe or a quail with young. Quails are more abundant than for years before; due to the short open season for the last 2 years. We had but 15 open days in this county last year.

W. R. Jackson, Pasadena, Cal.

I have just returned from a 6 weeks' hunting trip, in company with Mr. Porch, of this city, in the Jackson Hole country, Wyoming. We hunted in the Shoshone mountains, at the head waters of Grey Bull, Buffalo, Pacific and Atlantic creeks, Yellowstone river, at Two Ocean pass, in the Gros Ventre mountains, at the head of Fall river, in Hoback basin, and at the head waters of Gros Ventre river. We had a delightful trip and a successful hunt, getting bear, elk, antelope and sheep. We went out with S. N. Leek and Charles Wilson, as guides, and were in the mountains just 30 days. I now have a nice collection of the game to be found in that section of the country.

J. M. Murdock, Johnstown, Pa.

We have had much rain in this locality. If it keeps up a little longer the chances for a good duck season are favorable. All the lagoons are flooded and some cover an area of a mile or more. The water is shallow and the bottom muddy. The great variety of water plants which grow in them afford inexhaustible food for thousands of ducks, coots, rails, etc. For the well equipped hunter this is a paradise. Alligators, jutias, wild hogs and birds abound. The climate is deliciously cool and the scenery beautiful. Keep up the fire against the biped swine until all are exterminated.

O. A. Fischer,
Trinidad, Cuba.

I wish to call the attention of readers of RECREATION to the good grouse and rabbit shooting in this locality. In no other place in Sullivan county is such game more plentiful. Sportsmen can get good accommodations at moderate rates at hotels or farm houses. This town is 12 miles from Calicoon, on the Erie, stage fare 75 cents, and the same distance from Monticello, N. Y. There are also numerous lakes here well supplied with bass and pickerel. In the trout season many fine fish are taken from streams in this locality.

Chas. P. MacDonald,
Late Capt. and Asst. Surg. U. S. V.,
Jeffersonville, N. Y.

If a person baits a clearing in the pine brush with grain for the purpose of attracting doves, is it sport to hide in the surrounding bushes and slaughter 8 or 10 of the feeding birds with each barrel? Is the one who does such shooting a sportsman?

G. H. Hollingsworth, Lansdale, Pa.

No, he is not a sportsman. He is a low down game hog of the coarsest and most vulgar type. How many of the readers of RECREATION agree with me in this?—EDITOR.

There is but little game here, though up to 2 years ago grouse were plentiful. We have a game hog, one Sherman Tunison, who shoots for market. He drives 12 to 20 miles a day, scouring the country and potting birds on the ground or wherever he can get them. There should be a law to prevent the sale of game.

J. M., Townsendville, N. Y.

Why doesn't someone fill that fellow full of buckshot while he is engaged in this dastardly work?—EDITOR.

Outside the club properties there is no goose shooting worth mentioning to be had at Currituck, except in spring. I am greatly pleased to see the increase in birds in this section. There is a most surprising number of gulls, considering the slaughter of 3 years ago. Last spring there was considerable illegal shipping of ruddy ducks. I propose to have that stopped this year if possible. This county is fairly alive with deer and bear.

A. S. Doane, Waterlily, N. C.

Special State Game Protector Furnside arrested an Italian, named March Domenich, in Glenville, on Sunday, for shooting robins. Justice Dutcher fined him $10 or 10 days in jail. The fine was paid. The League of American Sportsmen intends to push all violations of the forest, fish and game laws, and offenders will be dealt with severely.—Exchange.

Here is one more robin shooter who has had a lesson in law. It may take a long time to educate all of them, but we shall keep our law school open and hope to graduate them in time.—EDITOR.

The law prohibiting the sale of game in our State shows its good effect already, for at no time in the last 10 or 15 years have ducks and prairie chickens been so plentiful. The law is being enforced most rigidly, and people are beginning to awaken more and more to your teachings and to understand more fully the value of laws protecting our game.

H. G. Anderson, Norseland, Minn.

In a lumber camp at which I spent a few days recently, and which was situated near a beaver pond, the men were continually seeing beaver in the daytime. One old fellow actually disputed the way with a chopper who happened to be in one of his roads. He put up such a scrap that the man had to turn out and give him the right of way.

W. S. Steward, Monson, Me.

Two Philadelphia men who spent 6 weeks hunting in the country North of here report finding at Fish lake, Cottonwood creek, Mount Lydia and Brook's lake carcasses of elk with nothing but the teeth removed. Nelson Yarnell, the well known guide, recently captured a fellow with 26 sets of elk teeth in his possession.

Al Davis,
Fort Washakie, Wyo.

Was in camp 40 miles from Shelburn with Mr. D. B. Frost and his father. We were in the woods 15 days and killed 2 large bull moose. October 4th I took a party of 4 to a place 30 miles from here. During the trip I called up 6 bull moose. We got 3 bulls and a cow.

W. J. McKay, Guide,
Shelburn, N. S.

There is not much large game here. We have, however, many quails, prairie chickens, rabbits and squirrels, and a few ducks. There are numerous bevies of quails within ½ mile of town. We have no fish; they have all been seined or dynamited.

George Glass, Perry, Ia.

I have so far posted between 6,000 and 7,000 acres in this vicinity. My scheme is working nicely. I no longer have to ask farmers if they will post their land; they come or write to me for posters.

W. S. Mead, Woodstock, N. Y.

There are plenty of quails in this new country. Turkeys and prairie chickens are found in some localities.

W. I. Lacey, Anadarko, Okla.

We have a fair number of ducks and geese. All other game is scarce.

G. A. Savage, Meredith, Kan.

It is not too early to begin planning your summer vacation. Where will you spend it? If you expect to camp out or to take a canoeing trip, a tent is the first necessity. I can send you, as premium, one of almost any size you may wish on the basis of one yearly subscription to RECREATION for every dollar of the price named in manufacturer's list. Write me for further particulars and begin taking subscriptions at once. The manufacturers have time now to fill orders. If you delay until their busy season opens, your entire vacation may be spoiled by an unavoidable delay in the shipment of your tent. By having everything ready for a prompt start you will enhance the pleasure of your trip tenfold. Send in your club at once and I will do the rest.

"In all my life," she said, with a sigh, "I have seen only one man I should care to marry."

"Did he look like me?" he carelessly asked.

Then she flung herself into his arms, and wanted to know what secret power men possess that enables them to tell when they are loved.—Chicago Record-Herald.

FISH AND FISHING.

TWO MINNESOTA PORKERS.

Sidney J. Huntley, editor of the Dassel *Anchor*, has proven himself a good fisherman as well as a genial editor. On a recent fishing expedition to Washington lake he succeeded in catching 79 fish, bass and pickerel, none being less than 2 pounds in weight, and the total catch weighing 250 pounds. Several of the fish were sent to the *Tribune* office as evidence of the good fishing that is to be found at Washington lake.—Minneapolis *Tribune*.

Dear Sir: I am informed that you recently caught 79 pickerel and bass, in one day. Will you kindly tell me if this report is correct? G. O. Shields.

Dassel, Minn.

It is true we caught 79 fish, not pickerel, but wall-eyed pike and big mouth black bass. Dr. W. E. Tryon and I were hunting ducks at Washington lake, 2 miles West of Dassel. Didn't go out to fish, but just as we were starting for camp threw 2 cane poles on the wagon, and it proved the redeeming feature of our 4 days' camp. Saturday afternoon, about 4 o'clock, we took the poles, and catching some live frogs, rowed out to Big Fir Point, and letting the boat drift along until we got a strike, we dropped anchor and proceeded to pull them in. Beauties every one, more pike than bass, but enough of the latter to make a good showing. One black bass weighed 5½ pounds, and 6 of the pike tipped the beam at 5 to 6½ pounds each. The largest pike were caught after the moon arose. That was a new experience for me, for never before have I fished with hook and line by moonlight. We quit about 7 o'clock with 79 fine ones in the boat, none smaller than 2½ pounds, and they were biting almost as fast as we would cast when we quit. Quitters, you may say? But Mesdames Tryon and Huntley were halloaing that supper was getting cold. We went out Sunday morning, brought the total string up to an even 100, and came back to town with the record of the season. Less than 5 hours' fishing and all landed with ordinary lines, common cane poles, and without the aid of a landing net. Our catch would have been much larger had we had a landing net, as we lost some beauties, and, as usual, of course, the biggest one got away. It was great sport, and I only wish I could have got a photo of the string to send you.

Sidney J. Huntley.

And you a newspaper man, too! You should have known better, but you seem as densely ignorant of the laws of decency as any Norwegian farmer in your State could possibly be. Of course you used "poles." No such vulgar swine as you ever use rods or reels or landing nets. They all fish by main strength, and for "records," as you did. And here's your record. You are low, degraded bristle backs.

I, also, regret you did not have your pictures taken, so I could have made you still more conspicuous.—Editor.

HERONS AND KINGFISHERS.

Monson, Me.

Editor Recreation:

Noting the arrest of Fred Veno for shooting 2 blue herons, I should like to read a discussion of the above named birds by sportsmen and naturalists in regard to the advisability of their protection. Last winter the laws of Maine were changed so as to protect these birds, as well as some others which were not protected before. Now, I, together with guides and others in a position to observe, consider this a sad mistake.

To illustrate: At Rangeley last summer I was much interested in the trout and salmon hatchery in that place, and used to visit it often to mark the progress of the baby tackle breakers. Everyone who has had anything to do with raising trout knows the aggravating dwindling down and gradual reducing of the numbers which hatch out, from causes as yet unknown and unavoidable. However, as the season advances those in charge begin to count on a certain per cent. of healthy, lively youngsters to liberate in the waters where sportsmen do congregate. At Rangeley a fair per cent. had reached the 2 or 3 inch stage. A large sum of money and vast care and patience had been expended to bring them to that stage. One Sunday in the fall, on visiting the hatchery, not having been there for some time, I was surprised to find some of the troughs empty, and all had suffered more or less.

"What has caused this?" I asked.

"Oh, herons and kingfishers," said the keeper; and they were powerless to prevent it, as the birds were protected by law.

"The herons are by far the worst," said he. "They come in the dark when no one is around, alight in a trough and gobble down a quart or so of the little fellows at a time."

It is a shame that, after the young trout get along so far, they should be gulped down in that fashion by that homely, no-account bird. What took place there we have every reason to expect takes place in all the small streams where trout are accustomed to spawn naturally. Is it any wonder trout do not increase so fast as they ought to by natural means? It seems to me that this protection of their worst enemies was a great mistake on the part of someone. What do you think, Brothers? Has anyone anything to say in defence of these birds? To me it would seem far wiser to put a bounty on them.

W. L. Steward.

CAMPING AND TROUTING IN COLORADO.

Galena, Kas.

Editor RECREATION:

I spent last summer in Colorado. Having fished the sources of the Arkansas river and the Eagle river from Red Cliff toward Glenwood some years ago, I decided to try the Southern portion of the State. Therefore I took a ticket to Wagon Wheel Gap for my wife and myself.

Arrived at our destination, we were soon dressed for the day's sport with the trout. Our first fishing was in Goose creek, a branch of the Rio Grande. The stream is 15 to 30 feet wide. We first strung 3 flies; a coachman in the lead, a professor next and a grey hackle for the top. The flies lit gracefully in the ripple. Zip! went the reel, and in a few seconds we brought to creel a beautiful rainbow trout. We continued along up the stream, took a rainbow, then an Eastern brook, and then a native mountain trout. When they ceased biting we found we had 16 beautiful trout.

Our first day was repeated almost every other day for 4 weeks; some days we met better success than on others, but in all it averaged nicely and was enough to satisfy. We found some genuine sportsmen, and only occasionally came across the detested fish hog. A person fishing those waters does not need a large assortment of flies. The coachman is the favorite, the grey hackle next, then come the professor and cowdung.

Last season there was a good number of campers all along the Rio Grande, from Wagon Wheel Gap down the river for 6 miles. Fishing at Wagon Wheel is not so pleasant as in the small creeks that empty into the Rio Grande. Besides the fishing at Wagon Wheel there are other interesting things, especially the mountain climbing. The drive to Creede, 10 miles, is charming. The hot soda springs are located near the hotel, 1½ miles from the station. They are considered as good as any. The water is about 135 degrees Fahrenheit. The climate at Wagon Wheel is cool. During July, so scorching in the East, there was a white frost on the board walks about the hotel nearly half of the morning.

S. N. Dwight.

ONE DAY'S JOY.

I was 12 years old that summer and the most enthusiastic angler in the place, often going out 3 or 4 times a week, and catching possibly one trout for every half dozen trips. That did not discourage me, but rather made me more anxious to get a big fellow.

That particular day dawned dark and cloudy; just the kind for July fishing. Fred had started out ahead of me, and when I stopped to catch grasshoppers for bait, there he was by the brook, shouting to me, and holding up a 9 inch beauty to show me he knew how to fish. I decided right there that I would catch a 9 inch trout, or camp out till I did. After walking up the road about a mile and a half, I struck over to the stream toward one of my bunks. There was a sharp turn in the brook. The mountain came right down to the bank at that place, terminating in a great rock, around which the water rushed. I hadn't been there long before I got a prize. He was the largest I had ever caught, but my cup of happiness was not quite full, for he lacked an inch of what I wished to get. After rebaiting the hook with a choice yellow grasshopper, I cast into the rapids. The hopper floated down to the big rick, passed it, and then with a rush and a splash it was gone. I gave one great, excited pull. Out came a glistening trout, and lay flopping at my feet; but not for long. The softest ferns were none too good for such a king, and I took many a peep at him as he lay in my creel. I fished down stream and got one more, not quite so large as his predecessor. I thought they made the handsomest pair I had ever seen. As soon as I reached the hotel they were measured. The largest was 9½, and his partner 9 inches.

Fred came in with his solitary trout, but when he saw mine he said nary a word, and never crowed over me again that summer.

H. G. Hutchinson, New York City.

1,450 TROUT.

The most remarkable catch of trout of the season was made at Green river last week by W. A. Kuepferle, William Felitz, James Collins, George Orth and Ace Sweesey, all of Seattle. Altogether they succeeded in landing 1,450 fish. The largest weighed 1¼ pounds. Mr. Felitz says: "Everyone laughs when we tell of that catch, but it is true, nevertheless."—Seattle (Wash.) *Times.*

When a subscriber sent me the above clipping I wrote the men mentioned therein, asking if the report was true. Their replies follow:

You were correctly informed regarding our catch in Green river.

W. A. Kuepferle, Seattle, Wash.

The report is correct.

Wm. Felitz, Seattle, Wash.

Your informant is wrong. We caught 550 fish in 5 days. Not bad for 5 people, but respectable. G. Orth, Seattle, Wash.

Why don't you fellows try the codfishing industry? It is a decent calling; eminently respectable, even, when compared with hogging trout. With your ability and a winch you could pull up several quintals of fish a day. Then when you reported your slaughter no one would laugh. No one would call you dirty fish hogs, either.—Editor.

NIBBLES.

I had but little of my favorite sport last fall, but one day Cooper Anderson, Dr. Washburn and I took a trip to Trout lake after ducks, and killed 12 teal. Trout lake is a beautiful little body of water about 20 miles from Telluride. It was once filled with trout, but dynamite, nets, etc., have done their deadly work, and now there are few fish there. But the beautiful scenery remains; even the fish hogs can't destroy that. I preached a sermon on game destruction, and now both of my companions are subscribers to Recreation.

I have shot a few mountain grouse, but they are getting scarce. Some deer have been killed in the neighborhood, and I hear occasionally of a bear being seen. There is a fine band of mountain sheep within 10 miles of town, but they are protected by law.

The sentiment here in favor of protecting game has been weak, but with a dozen Recreation subscribers now standing up for the law the sentiment will grow stronger. C. M. Coleman,
Telluride, Colo.

I caught my first large fish at Wolf lake, Indiana, a small pond well stocked with pickerel and about 15 miles Southeast of Chicago. We left home at 2 o'clock one morning, 3 months ago, with our outfit and a sufficient quantity of grub. After arriving at the boat house and arranging for a boat we went down the inlet about 2 miles. There we cast for nearly an hour, without success, the weeds being so thick we could scarcely move the boat around. After leaving that location we met with better luck, and my friend H. landed our first catch, a 7¾ pound pickerel.

He had no sooner placed it in the live bag than my old Bristol bent nearly double. I was so excited I could scarcely stand up in the boat. H. took the rod from me and after playing the fish over half an hour, among thick weeds, succeeded in getting him safely in the landing net.

That was enough for me, a 14 pounder! I was so overjoyed that I could fish no longer. Frank Stick, Chicago, Ill.

Fishing was good here last season, beginning with large mouth bass in the spring and through the summer, great Northern pike (pickerel) and small mouth bass in the fall, blue gills and perch at all times. Frank Vrooman and Cate Walker are good guides. While out fishing recently with my cousin, Robert B. Buell, of this place, I got a strike from a fish near the boat and gave him line. At the same time my cousin threw his bait out near mine and got a bite. The lines both began to run out, and finally I struck my fish. When I began to reel him in we found the other line snarled with mine. After a few minutes' fight I succeeded in getting a 3 pound small mouth bass into the boat and found he had swallowed both minnows and was securely hooked in the gullet with both hooks. Did anyone ever have a similar experience? W. B. Halcomb,
Lake Geneva, Wis.

I was at Avalon, Catalina Island, last summer. That is the true home of the game fish, likewise of the fish hog. The Tuna Club is doing much good in encouraging sportsmanlike methods by offering prizes for record fish caught with rod and reel. Many fishermen simply play their fish until alongside the boat and then let them go. The yellowtail, a fish of the salmon family, is the one most sought. It is a hard fighter and weighs 8 to 50 pounds; the average being about 14. I caught 4 yellowtail that weighed 13½, 14½, 16 and 16½ pounds; also a 22 pound shark.

W. R. Jackson, Pasadena, Cal.

With my friend G. W. Huddleston, of New York, I have enjoyed 3 delightful summer outings near Deerwood, Minn., 105 miles West of Duluth. That portion of Minnesota has innumerable lakes, gems of beauty, teeming with fish and environed by forests of pine, oak, butternut, birch and elm. Our camp was especially attractive in being near a splendid spring of cold water. My friend is an enthusiastic and successful fisherman, and hopes to spend many more summers in the same spot. L. H. Woodin, Norfolk, Va.

An eel was recently taken, down at the East end of the sound, by one of the keepers of the Little Gull light, off New London, in a lobster pot. It weighed 14 pounds and was 4 feet 9 inches in length. I have always lived around the water, and have heard of eels that weighed over 6 pounds, but that one put them all in the shade.

E. M. Leete, Guilford, Conn.

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

A HEART TO HEART TALK ABOUT GUNS.

Red Lodge, Mont.

Editor RECREATION:

I see many sportsmen continue to praise small bore rifles. I have used nearly all kinds, from 22 to 50-100-450. At present I use a Stevens' 22 extra long for big game as often as I do my 25-35 or 50-100-450; but I never shoot at an animal with it unless I am sure I can place the ball where I want it. I do not wish to cripple game and have it escape to die a lingering death. My experience of 19 years as hunter and guide in regions where big game abounds convinces me that the 45-70-405 and the 45-85-405, both of which can be shot from the 45-90-300 Winchester, are the best all around cartridges for large animals.

I have shot elk, big horn and bear through and through with the 30-30 and the 30-40 U. S., and if the ball did not strike a bone or a vital spot, the game would run a long distance. Moreover, it would often escape entirely. Often I have trailed animals so shot one or 2 miles without finding blood; and some that I finally found required one or more shots to finish them.

Some say if you hit the animal in the right spot any caliber is fatal. True; but how many can hit the right spot? I have had many queer experiences bearing on that point. I was once camped with a party at Sulphur Springs in the Beartooth mountains. Two of us started on horseback to get an elk. We found a large bull near camp, lying with his back toward us. My companion dismounted, dropped on one knee and fired with his 45-70. The elk jumped up and ran at least 150 yards, struck a pine tree 5 inches in diameter, broke it off and fell dead. The bullet entered back of the left shoulder, went through the heart and out ahead of the right shoulder. The hole through the heart was almost large enough to thrust one's fist through.

At another time I was camped on Slough creek with a man from St. Paul. One morning while yet in bed we heard a noise like the braying of a donkey. We grabbed our guns, jumped out and stood face to face with a 6-point bull elk. He was about 20 yards from the tent, looking at it over his shoulder. My companion fired his 45-90 and the elk ran. We followed the animal 100 yards and found him. He, also, had struck a tree, head on, and fallen dead. The ball had gone through the heart, lodging against the skin of the opposite side.

Someone signing himself "Syracuse" questioned the probability of some heart shot stories I wrote in a back issue of RECREATION. He characterized them as "fishy" and said medical men claim that if the heart be punctured even with a needle, it causes paralysis and instant death. Perhaps the following story will be easier for "Syracuse" to digest:

I was guiding a party, one of whom was C. E. Hibbard, of 308 Delaware street, Kansas City, Mo. We were all in the saddle with the pack train close behind. Our meat supply was running short, and when we saw a deer ahead I told the sportsman nearest me to dismount and shoot. Before he could do so the deer was off. I sprang down and took a flying shot with my 30-30 Winchester. The deer ran 150 yards, stopped, looked at us, turned, ran 100 yards farther, and out of sight behind a rise of ground. When we came up it was dead. The 30-30 ball entered the shoulder. Beyond that we could not trace it until we came to the heart, or rather, to what was left of it. It was a mere mass of bloody pulp that would not hold together while we removed it. The liver was in the same condition. The ball on striking the shoulder had separated into what was practically a charge of shot. I followed back the tracks of that deer, step by step, to where he was shot, and not a trace of blood could I find.

After taking my last hunting party to the railroad I was driving home with my wife and a load of provisions. It was snowing a little on old snow, and I saw where a small bunch of deer had just crossed the road. It was the last day of the open season, and as I had not killed any of my legal allowance of game, I determined to make the most of my opportunity. Taking my wife's 22 Stevens' Favorite, the only rifle I had with me, I followed the trail 100 yards or so into some thick burnt timber. Presently I saw a deer running, 75 yards ahead. I fired, and, without waiting to see the result, put another cartridge in the gun. Looking up, I saw, as I supposed, the same deer still running. I fired again, reloaded, fired, reloaded and fired the fourth time. I put a fifth shell in the rifle and, after waiting a moment, walked to where I last saw the deer. I found one large buck and 2 fair sized does lying within 10 yards of one another.

Near by was another trail, and, knowing the 22 seldom spills blood, I followed the track. Within 30 yards I came on a large doe, dead. In all 4 the bullets had passed either through the heart or very near it.

I have since killed 3 bucks with the same rifle with one shot each. My wife, also, killed a large bull elk with the little gun. The ball went through shoulder, heart, broke a rib on opposite side and stopped against the skin.

The rifle whose work I have described has a somewhat remarkable history. Before I tried it on large game and while shooting at a target, a ball became lodged in the barrel, about 2 inches from the muzzle. I blew it out with another cartridge, and in doing so swelled a well marked ring in the barrel where the first bullet had stuck. Later, while driving with the gun leaning against the dashboard, a sudden bump threw the rifle out and 2 wheels passed over it, bending the barrel badly. When I got home I dismounted the gun, knocked off the sights and threw the barrel away, intending to send for a new one. I neglected to do so, however. After the old barrel had lain outdoors several months, I chanced to speak of it in hearing of my father. He said he had often straightened bent crowbars by striking them over a log, and suggested that I try that plan with the barrel. I said he could strike 1,000 bent gun barrels over a log without making one straight enough to shoot with. Nevertheless, to humor him, I hunted up the old barrel and tried my luck. Two blows so much improved it that I could see through the bore, which before had been impossible. I continued whacking the barrel on a log until it appeared perfectly straight. I put on the old sights, lined them by my eye, and getting some cartridges tried the gun. To my surprise, I put 7 consecutive shots into a spot the size of a dime, at 15 paces. No alteration has been made in the weapon since, and my father never sees it without reminding me that what is good medicine for a crowbar may be equally good for a gun. E. E. Van Dyke.

THEY STILL WRITE TO PETERS.

Philadelphia, Pa.

Messrs. Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—I have read in RECREATION the correspondence which has passed between yourselves and the editor of the magazine, and I trust you will pardon me if I say that in my opinion you are on the wrong track. You will probably remember that P. T. Barnum once said, in effect, it didn't make much difference how you became known, the main thing being to get your name before the people. It seems to me that an occasional adverse criticism, with its attendant host of letters refuting it, is about the best sort of advertisement one can get, both because it is all free, and because it is placed in the reading pages, where everybody will be sure to read it.

Supposing this man Radcliff had not written the letter in question, but had told a friend, and that friend had told another, and so on and so on. You would never have had the chance to contradict him, would you? But when he comes out in print, it gives your friends the opportunity to call him down hard, and with such positiveness that every reader of the magazine is convinced the first chap didn't know what he was talking about.

Sportsmen, as a rule, are only too anxious to tell about their favorite weapon, ammunition, etc., but if you were in doubt as to whether your unknown friends would defend you, how easy it would have been to drop a line to a few you do know, asking them what their experience had been with the gun and shells in question, and suggesting that they write RECREATION direct, telling what they knew. RECREATION would have printed every such letter, for it is the policy of the magazine to print sportsmen's opinions, no matter what they are; and you would have received a vindication, and an advertisement that money couldn't buy.

I trust you will pardon this letter, but I am both a sportsman and an advertiser, and, as I said before, I think you distinctly in the wrong. As a last word, the controversy has had this effect on me: I shall buy some of your shells in the near future and try them in my Winchester repeater. If they do not jam, I shall be sure to write RECREATION to that effect.

Yours truly, E. Wager-Smith.

Vincennes, Ind.

The Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—I noticed in RECREATION a statement to the effect that your shells have so little rim they can not well be used in the Winchester repeating shot gun. Being interested in guns and ammunition and regarding the correspondence pages of RECREATION as an open forum in which persons of similar tastes are free to discuss questions of this kind, I expected that you or some of your friends or customers would meet this statement either with a frank admission that your shells were not adapted to that particular gun or with an explanation showing wherein the first correspondent was mistaken. On receipt of the next number of RECREATION I was much surprised to find that your only reply was the withdrawal of your advertisement. I have neither the wish nor the right to find fault with your methods of doing business, but I may be permitted to remark, as an impartial outsider, that denouncing all criticism of your products as manifestly false and malicious may be a manly and independent way to answer a critic, yet it is scarcely a satisfactory and businesslike way to treat prospective customers who consult a sportsmen's magazine for information concerning ammunition. I feel sure your products will stand the test of a free discussion by their users, but your action in this matter does not strengthen this belief. As a timid man I should hesitate about making purchases of a firm whose salesmen, instead of making a civil explanation of an article's merits or defects, promptly kicked a critical or ignorant customer out of doors. I take the liberty of addressing you in this way merely to show you how your action looks to disinterested readers of RECREATION, and I trust you will receive this letter in the friendly spirit in which it is written.

Yours truly, Angus Gaines.

Gouverneur, N. Y.

Messrs. Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—I have read the correspondence between your representative and the editor of RECREATION. I judge your advertising manager is a sedentary dyspeptic and consequently irascible and unreasonable. Mr. Shields is president of the L. A. S., a society which, through RECREATION and its members, is doing much to protect game, birds and fishes throughout the United States. The withdrawal of your patronage means limiting to that extent the facilities of RECREATION to prosecute the work in which it is engaged for the benefit of all. As a member of the L. A. S., and a staunch supporter of Mr. Shields in his good work, I feel it a pleasurable duty to thus express to you my strong disapproval of your conduct, and to claim before you that you are allied with the game hogs, since you are opposed to Mr. Shields. I trust all the sportsmen in the country will, by withdrawing their patronage from you, make you see yourself as others see you. Yours respectfully,

Dr. B. W. Severance.

Stony City, Iowa.

Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—Have read RECREATION'S article on your withdrawing your advertisement from its pages, and think your reason for so doing is far from sufficient. I have used your shells for 6 years past, and have read RECREATION only 3 years. My admiration for the little magazine that is putting up such a gallant fight for game protection is great, and I believe the sportsmen of the country generally will disapprove of your action. Let us see your advertisement back in the journal next month. Respectfully,

W. A. Kelley,
Secretary Stone City Gun Club.

HINTS TO THE REMINGTON PEOPLE.

Much valuable discussion has lately been indulged in regarding the symmetry of the Remington rifle, and attributing its failure in popularity to that point.

This is not the case, for their long range target rifle, with pistol grip and checkered stock of fine wood, was never surpassed in appearance by any rifle, and it is equal in beauty to its far famed rival, the Sharps, "the champion of the world."

With the Sharps, the Remington shared the championship of the world, for they both helped win the greatest and last great international matches ever held—Wimbledon, Dollymount and Creedmoor.

The Remington people at one time possessed the finest machinery for rifle making in the world, and rose to the height of popularity with their production; but success and popularity, aided by the marksmen of the country, made them conceited, and feeling they alone were the authors of the success of their arms, they refused to assist the men who made their record possible by such guns as these men requested. Their position was, "Take the stereotyped gun we make, or nothing." The consequence was natural. Sportsmen dropped them and took other arms. The Remingtons, instead of losing their place by unsightly finish, lost it by lack of courtesy.

Lately they are much more courteous under new management, though I fear it is too late to regain their old place, even with that most excellent and most beautiful repeater, the Lee Remington, which they now place on the market.

The Stevens Co. is fast gaining popularity by its willingness to help sportsmen; and Mr. Barlow, of the Ideal Company, will tell you it pays to cater to their judgment. Sooner or later several of our large gun and revolver manufacturers will receive the Remington lesson. Among the latter are the Colt and S. & W. people, who believed nothing could supersede them because the Government was partial to their product; and a severe setback the Colts received when the Government refused their automatic pistol. In their arrogance they believed this impossible. Inroads are rapidly being made on their popularity by courteous rivals, because of the arrogant stand of the Colts and the insolent treatment sportsmen receive who request of them something special.

I hold letters of refusal from both these concerns for special work.

E. E. Stokes, New York City.

I thank Jack Pattern for his kind words about my favorite, the Remington, even though he condemns my taste in gun mounting. The No. 5, whose beauty he so strongly approves, I have not been so fortunate as to see. It is one of my few lingering hopes to own a Remington-Lee 30-30. I see that condemned by some sportsmen as lacking penetration and shock at long range. That does not disturb me when I remember that if it possesses the power to put a bullet farther than another weapon of similar caliber it must have, also, the momentum to shock proportionately.

I recently tried my No. 3 against 2 younger men, one of whom carried a Stevens. Although I am nearly 60 I did not have to hide when the day was over. The grand old No. 3 showed itself equal to all requirements, and although its owner has been shattered by 24 years of asthma, and was also handicapped by blindness, it hugged the bull's eye all the while, and finally drove a clean center. I have a new reloading kit from the Ideal company, and intend to buy a telescope sight, which will give me a new lease, maybe, on my eyes. I advise young sportsmen to get an Ideal reloading outfit. It will cheapen ammunition and extend the range of experiment.

I used King's semi-smokeless powder, which proves itself a jewel for the sportsman. I want to try Laflin & Rand's smokeless once, and if the Robin Hood Co. ever gets out a rifle powder as good as their shot gun solid gas, it will find its way to the chamber of honest No. 3 at once.

Let someone who has tried No. 5 in the field, or the Remington-Lee at target or on game, give his experience. Why should all the Remington disciples "go 'way back and sit down?"

W. H. Nelson, Washington, D. C.

FREAK SHOTS AND THE SAVAGE RIFLE

Writing of what he considers a fault of the Savage rifle, M. L. Parshall tells, in October Recreation, of seeing a buck shot in the head with that gun. The bullet struck the skull and flew into bits without penetrating the bone. If the buck was not secured, who knows what the bullet did? Again, in the case of the deer that escaped after being "hit squarely in the shoulder," how does Mr. Parshall know where it was hit?

All who have hunted much know how easy it is to be mistaken in such matters. A friend, hunting with a Savage rifle, fired at a small buck. The animal fell, but got up again and ran. A second shot killed it. Then it was found that the first shot, which had apparently knocked the buck down, had merely cut a crease in the hair of the neck, without even touching the skin.

One of a party of hunters fired at an antelope on a hill half a mile away. The animal jumped up and ran out of sight. One of the party followed and found it dead within 100 yards of where it had been shot. The bullet struck just behind the foreleg and came out at the brisket. At no point in its course was it more than an inch below the skin. And it was fired from a Savage, too.

One of my friends was hunting with his brother. One carried a Savage; the other a 45-70 Ballard. They saw a bunch of antelope and fired together, both scoring. The 45 bullet hit just behind the shoulder, yet the animal lived 15 or 20 minutes. The Savage hit an antelope in the fleshy part of the thigh, passing out through the opposite flank. The 'lope ran a short distance, but was dead when found.

I shot at a deer in thick cover which hid all but a small part of one hip. The bullet cut the bone of the tail, an inch from where it joined the body, paralyzing the deer so it could not get away.

From all this I conclude that it is hard to tell beforehand just what a bullet will do; but I am satisfied there is no gun more deadly than the Savage.

If Mr. Parshall wants to find how little resistance is required to expand a soft-nosed bullet, let him suspend 25 or 30 sheets of wrapping paper an inch apart by a string. Fire through them and note the size of the hole in the last sheet.

In shooting at a running deer about 100 yards distant, I always try to hold on his shoulder and fire just as he strikes the ground after a jump, or hold a little high on his neck and fire as he rises from the ground.

W. B. Parker,
Pony, Mont.

In October Recreation M. L. Parshall finds fault with the Savage. It appears the only fault it has is with the ammunition. I believe if soft point bullets were made with a thick jacket around the base, or at least around the middle, they would spread only on the point no matter how big a bone was hit. The only thing I should like to see changed in the Savage is the finger lever. There is too big a space between it and the trigger, and I find it a little awkward to close when operating in the shoulder position; it seems too near the shoulder and too nearly horizontal. Can you tell me if the Savage Arms Co. won any prizes at the Buffalo Exposition?

Gordon Sproule, Montreal, Can.

In October Recreation M. L. Parshall says one fault of the Savage rifle is that its soft nose bullets when striking a bone, such as the skull of an animal, will not penetrate, but fly to pieces. Soft nose bullets fired from any rifle will do the same under similar conditions. The fault is not with the rifle, but with the rifleman; he should choose a more favorable mark than the skull. I have used all the latest models of high power rifles, and think the Savage the neatest, strongest and most accurate of all. L. D. Bailey, Lead, S. D.

THE PROOF OF THE PUDDING.

The Marlin proposition strikes me as so extraordinary that I must express my opinion of it. It seems almost incredible that such a firm should attempt to adjust a real or fancied grievance by striving to undo the good work achieved by Recreation and the L. A. S. That is where they hit me hard; though I do not think they could do it with one of their rifles, especially if they had to shoot more than once; for judging from the many criticisms I have heard for years past it would probably balk and give me time to make myself scarce.

Every fair minded man must realize the vast amount of good that has been done by Recreation and the League. Sportsmen, it is up to you. Give G. O. Shields the encouragement and support, both financial and moral, he so richly deserves for his perseverance, nerve and ability as a protector of game. Get your friends to help, too, and show Mr. Marlin and others of that ilk that they have another guess coming. The Marlin people are foolish in attempting to do up the L. A. S., for that is what it amounts to when they attack the official organ of the League, and sportsmen will not stand for such a play.

As I size this proposition, it seems Mr. Marlin brought suit against G. O. Shields and it was thrown out of court. That should have ended the matter. But Marlin then accuses Shields of having killed too much game 25 years ago and calls him the "hog of game hogs." We will admit, by way of argument, that Mr. Shields did kill more game 25 years ago than he should have done. Most of us would have done the same in days when game was plentiful and no one thought it could be exterminated. Then Mr. Shields, that slaughterer of game, according to Marlin, after pleading many years in books and magazine articles for moderation in game killing, conceived the idea of publishing a magazine demanding the protection of game animals, fish, birds, forests, etc. If Mr. Shields ever did kill game indiscriminately (which I doubt), he has been the cause of saving many lives of game animals and birds for every one he has taken.

Brother sportsmen, do not judge a man by what some sore-head says he has been; judge him as you find him. We certainly know what our champion is to-day and what he has been for years past. Follow his advice as laid down in Recreation and in by-laws of the L. A. S. and we will have plenty of game and fish for a long time to come. I believe the time is not far distant when all sportsmen will see where it is to their interest to join the L. A. S. and give us their support in this great cause.

I have the utmost faith in Mr. Shields's ability to protect himself and our interests regardless of the 2 little pamphlets that are being sent out from the Marlin gun shop. W. S. G. Todd., L. A. S., 3403.

NOT EVERY SHOT WILL KILL.

Any man who has killed much big game knows that at times he can kill anything with any kind of gun, while at other times he apparently needs a Gatling. There is no gun made which is equally good at all ranges and for all kinds of game. I have owned 8 different makes of rifles in the last 5 years. If I were hunting deer only I should want nothing better than a 30-30. For moose and caribou, in a heavily wooded country, I prefer a special, extra light 45-70, built for smokeless powder In the West, where the country is open and game is generally seen at long range, I should use a 30-40 with smokeless powder. If I could afford to buy only one gun, and had to use that for everything, I should certainly want the 30-40, as it will use all kinds of loads and kill without much mutilation anything from a grouse to a moose.

All who have hunted much have seen many things that are hard to understand. At one time I used a 40-82, and killed a deer with it. However, it took 5 shots to do it; the first broke the hip and went through the body lengthwise, 2 went through just back of the shoulder, one through the neck, and the last through the head. With the 40-82 I killed a large moose, and found 2 30 caliber bullets sticking in its hide. On another occasion I shot a moose through the head with a 30-30, and although the bullet was a soft point it did not mushroom. I shot an elk with a 45-70 smokeless. One shot merely broke one of the forelegs, close to the shoulder, the metal jacketed bullet remaining in the leg. Another shot broke the shoulder, went through the body almost lengthwise, cutting 4 ribs, and lodged just in front of the hip on the other side.

When speaking to Mr. A. J. Stone,

some time ago, he said he had killed a good many sheep with the 45-90, but on one occasion it took 8 shots to bring one down, although almost any one of the 8 apparently should have been fatal. No man should blame his gun or himself if he does not kill everything he fires at.

C. H. Stonebridge,
New York City.

THINK THE 25-20 THE BEST.

In reply to H. F. L., Washington, D. C., will say that, in company with Gilman W. Brown, of West Newbury, Mass., the best authority on rifles whom I ever met, I have made careful experiments with all the cartridges H. F. L. named.

We found the 25-20 single shot cartridge superior to the 32-20 under all conditions.

The accuracy of the 22 long rifle for short distances, when not affected by the wind, is almost beyond belief. It is the most accurate cartridge made, although for hunting small animals the 25-20 is preferable, owing to its greater power.

Tests were made with the following rifles: 32-20 Winchester, single shot, 24 inch barrel, telescope sights; 22 long rifle, Winchester single shot, 26 inch barrel, peep and globe sights; 22 Stevens Pocket rifle, 15 inch barrel; 25-20 Stevens Ideal, No. 44, with Lyman sights, 26 inch barrel.

As between 25-20 single shot and repeater, buy the former for the sake of its superior cartridge. Both Winchester and Stevens single shot 25-20 rifles are splendid guns for ordinary shooting. I prefer a Winchester. I have owned 10 and never found the slightest fault with any of them.

D. P. Page,
Newburyport, Mass.

Answering H. F. L. about 25-20, 22 long rifle and 32 W. C. F., the 25-20 is the most accurate of the lot, and has good killing power on small game. I have a friend who owns a 25-20, and he says it is a good rifle for squirrels and rabbits. Du Pont's is the best black powder for reloading.

Charlie Linkhart,
Port William, Ohio.

ELBOW GREASE AS A GUN CLEANER.

In November Recreation Harry Cranston says he can not keep rust out of his rifle. The trouble is due to the fact that he does not use enough elbow grease. It does no good to clean a gun until it is as bright as a dollar. Unless in absolutely perfect condition the bore will look brighter when half cleaned than when entirely free from powder, dirt and grease. You must keep at it with dry rags, wet rags, oiled rags, and again dry ones, until a rag can be run through without being discolored. Then oil the bore, and, if you've done the job well, no rust will be found when you pick the gun up to show your friend how you do it. I use a Tomlinson cleaner on my shot gun and it saves work; but there is no such thing made for rifles.

In every issue of Recreation there are accounts of especially close-shooting guns and loads. I bought a standard Winchester take down gun a year ago. With it I killed a few ducks at extremely long range. With it, also, I missed or feathered many at 30 to 45 yards. Evidently I was one of the 9 out of every 10 men who use guns too good for their eyes, so I sold that gun, and have just received a new cylinder bore. I think I now have the best gun for game shooting. It will be just the thing for buck shot or ball cartridges if I ever want to use them. I put 5 No. 5 shot in the first duck I fired at, and killed the bird instantly. For an all-around gun, give me a cylinder bore Winchester. I use Laflin & Rand smokeless when I can get it. After that I'll take Dupont.

C. R. R., Marengo, Ill.

AN EXPLANATION.

I was pleased to see Dr. Keenan's criticism in July issue of my exploits with the 30 Winchester. My article was intended as a satire on some letters appearing in the gun and ammunition department of Recreation; such, for instance, as deer running away with hearts shattered or falling dead at the mere report of the rifle, etc. Had Recreation inserted it as written its object would have been apparent, but unfortunately the editor strove to vest it with an air of probability. It contained, however, a little truth. I have used, as I stated in my article, a .303 Winchester, not 30-30, model '95, not '98, for 2 or 3 years, and find it a weapon of perfect accuracy, and, with the metal jacket bullet, of terrible energy. The larger caliber rifles may be more deadly, but if so are certainly, for ordinary game, unnecessarily so. Dr. Keenan may deem me romancing, but it is true nevertheless, when I state that at 65 yards I put a bullet into the nostril of a deer without lacerating it in a perceptible degree; but it smashed the jaws and cheek to pieces and tore a great hole at point of egress behind the ear. Nor was my account of severing the buck's antler at Monroe lake a fable; but the rest was an effort of the imagination. I yield to none in admiration of Recreation and its teachings, and should be ashamed to send a deliberate falsehood to its editor. Even Grizzly Pete was taken seriously by many, so I am not singular in being not understood.

N. O. L. I., Swansea, B. C.

PETERS CARTRIDGES FOR THE 22.

There are many good things in RECREATION, but of all departments that of Guns and Ammunition interests me most. Like Mr. Gambell, I am a champion of the 22, and so far as the relative merits of large and small calibers for ordinary hunting are concerned our ideas run parallel. When it comes to ammunition they disagree. Mr. G. has evidently never used Peters' semi-smokeless cartridges, or he would not think black powder cartridges better. During the last 2 years I have fired nearly 5,000 22 caliber cartridges, chiefly at targets. I have found the semi-smokeless so far ahead of the black that there is scarcely any comparison.

The dirt and grime of the cartridges mentioned by Mr. Gambell are horrible. After shooting a dozen shots with them a gun will become so fouled as to upset the bullets at 25 feet. With the Peters I have fired 100 shots without cleaning and have not been able to detect any difference in the shooting. Moreover, one rag drawn through the gun with a field cleaner would clean it thoroughly. I also find they will hold up 25 to 30 yards farther than the black powder.

One mistake Mr. Gambell made was taking his rifle indoors with cartridges in the magazine. That should never be done. I think the Winchester repeater the best, but deplore the fact that one gun will not handle both short and long shells.

W. C. Whittmore, Redlands, Cal.

A BUNCH OF QUESTIONS.

We are expected to believe that low pressure smokeless does not increase either the velocity or penetration of bullets more than black powder. If that is so, why do the manufacturers put a metal patch on bullets loaded with low pressure smokeless? Is the steel in the barrels of Stevens' Ideal rifles of a quality that would be safe in using 32-40 or 38-55 smokeless shells in them? Is the twist in the above mentioned rifles deep enough to shoot the lubricated grooved bullets? How long would a Stevens Ideal barrel last when shooting 20 32-40 or 38-55 cartridges every day? Does the Remington Arms Co. or the Ithaca Gun Co. make a double barrel hammerless with one barrel full choked and the other cylinder bored? How does the 25-35 compare with the 30-30 for hunting? Does the No. 3 Remington sporting rifle shoot farther point blank than the Winchester repeater of the same caliber? When will the Savage rifle be manufactured in another caliber. Amateur, Kelsey, Mich.

A 16 GAUGE ITHACA.

Having for some years wanted a 16 gauge gun, and getting a good second hand 12 gauge Ithaca hammerless, I wrote the Ithaca Co. asking if they would fit 16 bore barrels to the stock. They replied they would, and for a reasonable sum I received the gun with the new barrels last November. As a 12 it weighs 7½ pounds; as a 16 it weighs 8. The new barrels are 30 inch full choked. Both old and new barrels fit nicely and the gun balances well. The Ithaca Co. did good work for me and at a moderate charge. The gunners here laughed at the idea of using a 16 bore to shoot sea fowl. After seeing the gun used with killing effect none of them said anything against a 16 gauge. One morning I shot 2 loons at a distance said by a veteran gunner to be altogether farther than anything he ever saw killed with a shot gun. My gun shoots well with black or smokeless powder and any size of shot.

Eugene F. Midd,
Hampton Beach, N. H.

A HINT TO 'SCOPE MAKERS.

One drawback in the way of the fitting up of a rifle with telescope sights is the exorbitant prices asked for the hangers, which are equal to and in many cases exceed the prices of a first class telescope for same. For instance, the hangers adopted by the United States Government for sharpshooting cost $15 to $20 a set, while the glass only costs $18.

One telescope maker, on being spoken to about this, said he recognized this unreasonable condition of affairs and felt it an obstacle to the introduction of telescope sights, but manufacturers are positively unable to remedy matters. The hanger manufacturers are obdurate and will not make concessions. Fitting a first class rifle with these sights costs far more than the rifle itself. Will not some manufacturing reader come to our aid with a first class hanger at a reasonable cost?

E. E. Stokes, New York City.

SMALL SHOT.

I wish to warn your readers against the practice, recommended by some correspondents, of using kerosene in cleaning guns and rifles. Kerosene is excessively penetrating, and will enter the pores of gun barrels. No amount of wiping will ever entirely remove it when once used; and therein lies trouble, as it produces rust. To put this idea to the test, swab the inside of a gun barrel with kerosene, then wipe it out and set the gun away over night. Next morning you will find it difficult to force a tight-fitting dry swab through the barrel, and will, moreover, find the cloth red with rust. I advise the use of 95 per cent. alcohol in cases where nothing but kerosene would seem effective. Still, boiling water is preferable, if proper care is used in wiping and thoroughly oiling with Winchester gun grease afterward.

L. A. S., 4753, Phila., Pa.

I have a .22 caliber Davenport R. F. rifle in which, owing to enlargement of the chamber, I can no longer use the 22 short. I have to use the 22 long. I can place 15 out of 20 shots in the bottom of a tomato can at 50 yards easily. I should like to know if the gun can be rechambered for the 22-13-45 W. C. F. It is take down and could be got at easily. The Davenport Arms Co. said it could not be done and the Winchester Co. said the twist of the rifling was not quick enough. I want a rifle to shoot well at 100 yards. Which has the longer range, the 22 extra long C. F. or the 22 Winchester single shot? Where can I get a reamer to rechamber the barrel for either the 22 extra long C. F. or 22-13-45 W. C. F.?

Chas. Vitous, Suterville, Pa.

Can high pressure smokeless powders be used in the Winchester 25-20 S. S. with good results?

B. W. Weller,
Cincinnati, O.

ANSWER.

The 25-20 Winchester single shot rifle is in no way adapted to high pressure smokeless powder. To attempt to use such powder in that or any other black powder gun is to invite disaster. The Winchester people warn riflemen against using hand loaded high pressure cartridges in any rifle. They supply, however, a 25-20 smokeless cartridge, of the same strength as the regular black powder load, which is perfectly safe and satisfactory.—EDITOR.

I noticed in October RECREATION an interesting letter from P. H. Manley, Gilmer, Wash. He disdains the use of the shot gun, or "game exterminator," as he styles it, and says if he "can not cut a grouse's head off with a rifle ball he thinks he does not deserve it." If he were in the East, and relied on his rifle to give him enough birds for a meal, he would go hungry a while. However, it is evident there are extraordinary rifle shots in his part of the country. Eastern bred grouse and quails will make a man with a rifle exceedingly tired.

H. J. E. Thomas, Sharpsburg, Md.

G. A. Mers, of Becker, Minn., wants a good gun for ducks. There are a number of good guns, each having some desirable point in its favor, and all having admirers. My choice is the Winchester take down repeating shot gun. This gun is moderate in price, and its shooting qualities are unsurpassed. The 12 gauge is large enough, and with 32 inch full choke barrel it is as good a duck gun as anyone could wish. The Winchester, too, is advertised in RECREATION, and a stamp will bring their catalogue.

W. M. Daniels,
Indianapolis, Ind.

I own a 30-40 Winchester. Have not yet tried it on game, but judging from the way it will smash a target I want no better gun. I have also a 30-30 Winchester. It has not the smashing power of the 30-40. I can not understand why anybody will endure the smoke, recoil and noise of a black powder rifle when the small bores are so much better and lighter.

Winchester, East Helena, Mont.

I have used U. M. C. cartridges and ammunition a long time and find them the best made goods on the market. They are as true to the mark as a cat to the hole in the wall unless it has its whiskers cut off. I shall use U. M. C. cartridges and no others.

E. A. T., York, Pa.

I prefer the smokeless rifles if only because of their slight recoil. Those who have been hammered by the old 45 can appreciate that point. I should like to hear from RECREATION readers who have used the Mauser or the Borchardt carbine.

H. A. Baker, Dorchester, Mass.

Which calibre of rifle is best for bear, moose and deer?

Roland Ramous,
Brooklyn, N. Y.

ANSWER.

I advise you to get a 30-40 Winchester or a .303 Savage.—EDITOR.

I should like to hear through RECREATION from someone using the Savage 30-30. I have one and like it.

W. B. Hescock, Waitsburg, Wash.

Should like to hear from some one who has used the Stevens Ideal No. 44, especially the 25-20.

W. E. Congdon,
Salem, Conn.

Should like to have opinions on the Winchester rifle by those who have used it.

D. R. McLean, Elora, Ont., Can.

When you are through with your rifle or shot gun for the season where will you keep it? Would you not like a handsome gun rack to hold it? If so, send me 5 yearly subscriptions to RECREATION and I will send you such a rack, made of polished buffalo horns. It will not only afford a convenient resting place for your gun, out of harm's way, but is an attractive ornament to a wall.

NATURAL HISTORY.

When a bird or a wild animal is killed, that is the end of it. If photographed, it may still live and its educational and scientific value is multiplied indefinitely.

SUCCESSFUL PHEASANT BREEDERS.

London, Ont.

Editor RECREATION:

I have just seen the April number of your interesting magazine, and my notice has been drawn to an article by Mr. E. F. Titus, *in re* Mongolian or Chinese pheasants. For many years I have studied the characteristics of the 2 distinct species of ringneck pheasants; that is, the English and the Chinese. I think, with Mr. Titus, the name Mongolian is a mistake. These 2 varieties should be named after the countries from which they were obtained. No doubt the English pheasant was of the same stock, originally, as the present Bohemian, but was improved into its present form by the introduction of the Chinese ringneck, which supplied the want that was felt in regard to the old English pheasant as a bird suitable for the game preserves which were to be used for shooting purposes. The English bird had been so much domesticated that it was losing its power of flight, so in order to improve this the Chinese pheasant was introduced, and now, according to the Darwinian theory of the survival of the fittest, the English pheasant has merged itself into the Chinese; but, with the usual accompaniment of any cross, the English ringneck is a larger bird than either the old English pheasant or the Chinese pheasant. At the same time the English ringneck retains many of the characteristics of both. It is not so shy as the Chinese, and it is much stronger on the wing than the original English. It is more easily raised than the Chinese. On account of its greater wildness, or shyness, the young of the Chinese pheasant are much more apt to get into trouble than the young English ringnecks are; but if the instructions given by Mr. Foster are carried out there is no reason why the Chinese pheasant should not be raised in increasing numbers each year. His article in July RECREATION is well worth reading and following by any fancier of pheasants.

I have found an even better sitter than the Pekin bantam, which no doubt is a useful mother but is objectionable on account of its heavy leg feathers. The mother I refer to is a cross between the "Silken" and the game bantam. This is a fair sized bird, capable of covering 11 or 13 pheasant eggs, is quiet and a most notorious setter. You can be sure of them at any time, as they only lay about 6 or 8 eggs and then set. You can break them up in 4 days and they start laying again in about 10 days, so you can have them to order at any time from one year's end to the other.

Another point, which Mr. Foster says nothing about and which I think it worth noting, is the season when the young birds do best. In this climate, at least, the last week in May is almost too early. I have better and stronger birds if hatched out about the middle of June. This may be accounted for by the weather often being cold and damp in May. The same cause prevents the development of maggots. Sun and heat are needed to make flies produce the eggs from which maggots come; and maggots are necessary to the successful raising of pheasants.

Dr. J. S. Niven.

Judging from the failures described by those who have tried to raise pheasants, it must be a delicate undertaking, and doubtless many who are curious to try it do not make the attempt after reading such articles. They should not be so easily discouraged. Raising pheasants is not more difficult than raising common barnyard fowls, and failures only result from not having a knowledge of the right medicine.

First, do not hatch the eggs in an incubator. It may be hard work to get enough old hens, but this is the only means to be successful. Even if you have to pay $1 each for the old hens, it will, in the end, prove cheaper than to have the eggs hatched in an incubator, and, later, see the chicks die. Every spring, for a number of years, I have raised thousands of pheasants, the loss averaging, in the most disagreeable years, not more than 20 per cent., with the exception of 2 years when incubators were used, the loss then being about 65 per cent. Had I continued the use of the incubators, my employer would have been unable to invite his friends for pheasant shooting in the fall.

The cost of raising pheasants is about $1 each, including hunting the eggs, food and wages, with the exception of my salary, which was paid from another fund. Give to each hen but 12 eggs. The chicks need not be fed until the second day. For the first week, feed hard boiled eggs and about 1-3 lettuce, mixed and cut fine. Small grain, such as wheat, may be fed the first 3 weeks. Later, ground corn may be fed until the birds are large enough to eat the whole kernels without serious results, which should be in about 5 or 6 weeks after hatching. Two meals are sufficient each day, if the birds can go around free. Do not discontinue the use of lettuce, though if used too freely it may cause diarrhœa and increase the per cent. of loss. Never feed milk or milk products if you would keep the loss down to the lowest percentage. Maggots and ant eggs make a good food, but should not be used until the birds are at least 6 days old.

Until the birds are 3 weeks old they should be kept under roof in dry quarters. Call them in before rain falls, if a storm is brewing, as loss will result if this is not done. Later, they will seek shelter of their own accord, in bad weather, if they have had plenty of food. In pleasant weather the birds may be allowed great freedom, but should always be protected against birds of prey. At night the birds must be kept in a stable. The young birds will stay around until large enough so that cocks and hens can be distinguished; then they stray from the stable.

These rules apply to the common pheasant. In raising the King pheasant, the loss is considerably greater, running up to 75 per cent.; but as these may not be much known in this country, I will not describe the special methods for raising them. If anyone wishes further information, he can have it by asking for it.

Joseph Brunner, Flat Willow, Mont.

BELIEVE GROUSE DRINK.

Last winter, while passing through a piece of wood, I came within sight of a grouse. As is my custom, I tried to get as near him as possible. When as near as propriety would allow I noticed he was standing at the edge of a tiny pool of water drinking, as I then thought and do now. That it was uncommon never occurred to me until reading the article of A. F. Rice. The bird was certainly dipping his bill in the water, but whether to get gravel, seeds or water I can not tell. After I had watched him some time, he looked at me as much as to say, "I am never afraid when that old hat is around." Soon he spread his wings and started for cover, but changed his course, coming within 15 or 20 feet of me. A short time previous he gave me an exhibition of his skill as a drummer. I do not hesitate to pronounce him an artist capable of a position in the Marine Band.

Last winter there were several gray and black squirrels and rabbits in the woods. I gave the rabbits apples and the squirrels corn. The grays were as fluffy as a snowflake, and the blacks shone like diamonds. They are all gone now. I suppose some vandal murdered them, and while such diabolical work is going on we are sending cheap whiskey and missionaries to foreign countries in order to convert the benighted heathen. May we hear more about grouse drinking.

A. D. Palmer, Montour Falls, N. Y.

Replying to A. F. Rice, I am positive that grouse do drink, as do the barnyard fowls; that plenty of water is highly necessary to them. In dry seasons they always congregate near streams and ponds, even though they have to leave better feeding grounds where there is no water. I have often seen them close to the water's edge and out on logs which ran into the water. Although I never actually saw a grouse dip his bill into the water, I attribute that to the fact that they had always seen me first and scented danger.

Last fall, in a dry time, it was only necessary to walk slowly along a road, which skirted the lake here, to get shots at grouse hurrying to the water from their feeding grounds above, and again returning, more slowly, to the feeding grounds.

Few people ever saw a grouse drum, but we all know it is a fact that they do.

W. L. Steward, Monson, Me.

I see in the November number of Recreation that A. F. Rice asks for information on the manner in which grouse drink. My knowledge of the matter is that grouse drink the drops of water from the grasses and leaves of trees, this being particularly the case in wide stretches of country devoid of standing or running water. I remember distinctly a grouse that whirred over my head a few years ago in a deep ravine of the Blue Ridge mountains alighted within 30 feet of me on the edge of a dashing, sparkling, rapid stream. Only a thin screen of laurel leaves separated us from each other. I saw that grouse drink a number of swallows from the brook exactly as a barnyard fowl does. She waded in the water knee deep, and after drinking she took a bath. She ruffed up her feathers until she was as large as a peck measure, and the way she flopped and threw the water was a sight. Her bath lasted fully 3 minutes, and when she was not bathing she was drinking. From her appearance she was evidently hatching.

W. L. Michael, Calno, N. J.

WHY THE SKUNK FARM FAILED.

BY E. C. VICK.

Having just completed an article showing the money to be made in raising skunks, I was greatly interested in "The Monroe County Skunk Farm," which appeared in November Recreation. I look to the skunk to turn to profitable use thousands of acres of waste land for which no other use can be found. The skunk is valuable on account of his skin and the oil, which is used for medicinal purposes. Over half a million skunk skins are shipped every year from this country to Europe, and the shipments are limited only by the supply of skins, which are dyed and then sold as Alaskan sable. Coats of this skin sell in

New York at the present time for $125 to $175 each. The skins as they are sold from the animal bring $1 to $2 each. The best skins are those taken in the coldest winter weather, and the oil is worth about 50 cents a fluid ounce. If desired, the scent sacs can be removed, and if properly done this does not injure the animal or the fur, doing away with all objectionable odor. This can only be done safely in young animals.

Skunks produce 6 to 9 young at a litter, breeding once a year. In farming, success will depend almost wholly on the care the animals receive. If you wish to fail read the article on the Monroe county skunk farm and follow their example. Begin on a large scale, without experience, and be in a hurry to get rich. If you wish to succeed secure a single skunk, care for it, watch it and learn its habits and requirements. If you can keep it alive and in good condition get a mate and try breeding. If you raise the young, get another pair, increasing gradually, and you will succeed.

It is possible in this industry, with work and experience, to make a clear profit of $10,000 a year on a farm of sufficient size, properly handled. If you are in a hurry to get rich and are not willing to work hard, do not try skunk farming, or, in fact, breeding of any kind; but with hard work there is no more generally successful, pleasant and interesting business.

Skunks must be supplied constantly with fresh water. Unless a pond or stream lies within the inclosure, a well must be drilled and an artificial pond kept filled with fresh water. Water in basins will not answer. This fresh water the Monroe county farm did not possess. Then, too, each individual skunk must have a separate hole, supplied by digging trenches and covering them with heavy boards, each hole supplied with a little straw with which to make a nest. The dens used on the Monroe county farm ,not even rabbits would breed in, to say nothing of skunks.

About 50 skunks will thrive on an acre of land, though crowding must never be permitted. The food mentioned in the article in November RECREATION is all right, and the fence was constructed in the proper manner. With proper holes for each animal, males and females need never be separated, as the young will be raised to maturity by the mother. The fences must be examined daily to see that no animal has gnawed an opening from the outside from which the skunks may escape.

The failure of the Monroe county skunk farm by no means proves that skunk farming is unprofitable. Vast fortunes are lost every year in the publishing business, but that does not prove publishing unprofitable, as millions are made every year in that same business. Fortunes are lost every year in business of all kinds, but as a rule it is simply the individual or company that is proved a failure, not the business; and so it is with skunk farming.

A BIRD STORY.

Indianapolis, Ind.

Editor RECREATION:

Until recently I was a firm believer in the superior fighting powers of the English sparrow. Indeed, was not everybody saying that the English sparrow was driving away the robins and all our other native birds? About 2 years ago, however, I had an opportunity to do a little observing that has changed my mind in this matter.

As I sat by my window reading, at the time of which I speak, I became greatly interested in a woodpecker which was boring into a dead tree that stood near. What a gorgeous thing he was! And how he worked! The themometer had reached a most discouraging height; yet with his feet hooked over the edge of the hole and with his tail braced firmly against the tree, he threw out the white shavings at a rate that made me wonder whether birds ever get warm, as people do.

At last the hole was finished; at least it was large enough for him to get inside to work. One day he came; but instead of jumping in, he perched on the edge and turning his head sidewise in bird fashion, looked in. I wondered in an idle warm-weather way why he didn't go in. Just then he did. There was a moment of silence, and then a squawking as of a hen caught in a fence. Immediately my woodpecker appeared at the edge of the hole, holding in his beak, which to my somewhat excited eyes looked as large as a pair of scissors, an English sparrow. With a vicious fling, the woodpecker threw the squalling sparrow to the ground. Then, after waiting a moment as though to make sure the sorry-looking bunch of brown feathers was getting away as fast as it could, he flew off.

I was so amused by this woodpecker who was not building houses for English sparrows that I told a friend about him. This friend is a man who is so fond of birds that he keeps, during the summer, a great basin of water standing in the shade of a tree for their especial benefit. In return for my story he told me one that pointed to the same conclusion; namely, that English sparrows are not the only feathered fighters.

One day 10 or 12 robins were disporting themselves on the edge of the basin of water. Presently a blue jay jumped down softly from a higher place in the tree to a branch just over the basin. He was still a moment; then he hopped down to the edge of the water. The robins, surprised and frightened, flew away, leaving the saucy bluecoat in possession.

He looked at the water; then cautiously he let down one foot until it reached the cool surface. Then with a squawk that was like an Indian war whoop he jerked it up. He repeated the performance with the other foot. Then, with a final whoop, he jumped into the water. His noise attracted 3 or 4 other jays, and the basin was soon a mass of fluttering blue feathers. The robins by that time had got their breath and held a council of war. They came flying back; and the blue jays, whom I had always thought the personification of the pugilistic spirit, were put to flight. Yet we are told that robins can not fight for themselves. Evidently we should not believe all we hear about birds; but we should open our eyes and see.

Anna M. Locke.

DO DOES LEAD?

I noticed an inquiry in RECREATION as to whether does or bucks lead. I can not answer the question in regard to deer, as in all cases where I have come on them, there has been a general scramble to get out of sight as soon as possible.

In regard to elk and moose, however, I am satisfied that cows lead. Two years ago on Buffalo river, in Jackson Hole, I saw a bunch of 7 or 8 elk, all cows but one. When they saw me they ran down the mountain, the cows together and the bull 25 or 50 yards behind. A few days afterward I saw a bunch of about 30 cows and calves with one bull. The bull bugled, and the cows and calves immediately ran. The bull stood until the cows were out of sight; then he followed them. I think he wanted to draw me after him to give the cows a chance to escape.

Last year, while hunting on the North fork of the Shoshone river, I saw a bunch of 6 or 8 cows and one bull. The cows ran down the side of the muntain with the bull in the rear.

I spent August and September of 1901 in the mountains along the Shoshone and Yellowstone rivers, and saw 300 to 400 elk. In some cases there were so many it was impossible to tell which led, but in small bunches cows always led. While fishing in the head waters of the Yellowstone, 3 elk crossed the stream within 50 yards of me, a cow first, a calf next, and a bull last. They did not see me until they had crossed the river. A short time afterward I saw 2 elk apparently following a trail; the cow was 50 or 75 yards in advance of the bull. Then I saw a bunch of 4 cows and 2 bulls; they saw me at some distance. Although uneasy, they did not appear much frightened and trotted off, the cows first. A few days later, while riding along the Yellowstone, I came on a bull standing on the shore. After standing a while he plunged into the river and crossed. Looking across I saw 5 cows and calves that had crossed before I came in sight. I waited a few moments until they turned and trotted off. When they had gone 50 or 100 feet, the bull followed.

In regard to moose, I have noticed 2 or 3 times that where a bull and cow were together, the cow invariably led. While following the trail of moose or elk, I have always found when the tracks were mixed that the bull tracks were last. That could easily be seen, as the bull stepped into the tracks made by the others. Of course there is a possibility that the bull may not have been with the others at the time the tracks were made; however, I am satisfied that with moose and elk the cows lead, and it seems reasonable that this is also the case with deer.

C. H. Stonebridge, New York City.

NEW AMERICAN MAMMALS.

The past 2 years has brought to light an astonishing array of new mammals of large size inhabiting North America. The following species are well defined, and constitute important additions to our fauna:

Kennedy's Mountain Goat—*Oreamnus kennedyi.* Described in 1900 by D. G. Elliot. Horns long, slender, spreading widely, and deeply ringed. Locality, Copper River, Alaska.

Mountain Caribou—*Rangifer montanus.* Described in 1899 by Ernest Seton-Thompson. Size, larger than other species, dark-colored. Locality, Selkirk Mountains to Cassiar Mountains, British Columbia.

Alaskan Moose—*Alces gigas.* Described in 1899 by G. S. Miller, Jr. Antlers of enormous width. Locality, Kenai Peninsula, Alaska.

Fannin's Mountain Sheep—*Ovis fannini.* Described in 1901 by W. T. Hornaday. Has white head, neck, abdomen and rump patch, bluish-gray body and tail, and brown stripe down front of each leg. Locality, Klondike River, and Lake La Barge, Yukon Province, N. W. T.

White-fronted Musk Ox—*Obivus moschatus wardi.* Named in 1901 by R. Lydekker, described by J. A. Allen. Has a dirty white band across the top of the head. Locality, East coast of Greenland.

Mexican Mountain Sheep—*Ovis mexicanus.* Described in 1901 by C. Hart Merriam. Large ears, large molars, full forehead, pale salmon-gray color. Locality, Lake Santa Maria, Chihuahua, Northern Mexico.

Stone's Black-Faced Caribou—*Rangifer stonei.* Described in 1901 by J. A. Allen. Forehead black, cheeks dark brown, end of nose grayish white, antlers heavy and with many erect tines on the beam. Locality, Kenai Peninsula.

All of these species seem to be justified by their differential character, although no one can say how many of them, 10 years hence, may find themselves branded "Synonym;" which, being freely translated, means "scientific error."

In the above memoranda, the English names of *Oreamnus kennedyi, Alces gigas,* and *Ovis mexicanus* have been kindly supplied by the editor of the Bulletin. Inasmuch as only 125,000,000 people speak the English language, and not more than 40,000,000 more are trying hard to learn it, the gentlemen who described and named those species did not think it worth while to bother with the bestowal of ordinary English names.—News Bulletin of the New York Zoological Society.

A FUR FARM.

Bangor, Me.

Editor RECREATION:

I fully appreciate the great courtesy you extend, in soliciting data in connection with my work, which may be interesting to your grand and growing army of readers, and in the course of time I hope to be able to send you some details. To me, the enterprise to which I am devoting myself more and more each season is not a novel one. The experimental side of it is the outgrowth of definite plans which were mentally laid down many years ago, long before fox farming in Alaska, or any other part of the country had been heard of. Trafton's island, in Narraguagus bay which was acquired during the past season, is about ¾ of a mile in length, and varies from about ¼ to ½ a mile in width. It is being stocked with several varieties of fur-bearing animals, to some of which the freedom of the entire island is perpetually extended; while others will be kept within fixed limits by fences.

For some time to come experimental details will be conducted with closed doors, as far as the general public is concerned, but the latchstring is always out to Mr. Ernest T. Seton, who has ever evinced the most lively and kindly interest in my undertaking.

One thing I shall try to determine is, whether foxes can be bred to color. This and other unsolved problems will make the experimental part of the undertaking interesting, as well as expensive. I have lost many valuable silver foxes by confinement, but have some fine specimens now running out on an island in Narraguagus bay below the town of Millbridge, protected by keepers living on the island.

The animals being colonized embrace the following varieties: Black, or silver, fox; Pekan, or fisher; pine marten; beaver and otter; besides several varieties of less value. As early as practicable, experiments with Russian sable will be taken up. I feel reasonably confident that the food problem for the varieties enumerated has been solved.

Having derived much pleasure from time to time from your reading contributors to RECREATION, I shall be willing to reciprocate to the extent of my ability in due time. I wish you the full measure of your deserts, and what more could you desire?

N. E. Skinner.

HAVE HEARD COON CALLS.

I have read with interest the articles in RECREATION about noises made by coons. I have hunted coons in Florida for the past 15 years, and feel qualified to say that coons do bark and chatter a great deal. I have been in the woods at night and have heard what I supposed were coons fighting. When I took my dog there he never failed to strike a coon trail, and tree him, too. I have often shot coons and wounded them, in the presence of witnesses, and the coons would bark and chatter like a screech owl. If unbelievers will get them a tame coon apiece, they will soon change their minds about coons not making any noise. I have had several tame coons, and they all made the same noise, except that the females never bark. When coons are pleased they purr like a cat, and when they are angry they screech and chatter something like a fox squirrel. When coons are excited or frightened, they bark and chatter as a fox squirrel does when he is angry. If F. W. Allard would get a wild coon and try to tame him he would hear noises, from that particular coon, at least. Both tame and wild coons make noises. I could cite many cases of coons making lots of noise, but possibly Florida coons are different from all others.

W. S. Marriner, Gabriella, Fla.

I have 3 pet coons, which I have a good chance to study. They make a loud, purring noise in the breeding time. When they play at night they make a noise that is between a growl and a snarl. They also whine like a puppy when frightened.

Harry Clark, Maple Park, Ill.

THE SQUIRREL A MEAT EATER.

When a youth I trapped mink and muskrats on a small tributary of the Kennebec river. I used the old fashioned squat trap baited with fresh meat. One morning after a light snow I found a trap with the spindle swollen, preventing it from springing. The bait, however, was missing and numerous squirrel tracks in and about the trap told me where it had gone. The next morning I found in that trap a red squirrel, flat as a pancake.

I once saw a chipmunk sitting on a rock and eating a young field mouse. He would clap it in his mouth, suck on it a while and then take it out, at the same time uttering a shrill note of defiance.

While I stood watching him, an old field mouse ran from under the sidewalk on which I was standing with one of her young in her mouth, carrying it much after the manner in which a cat carries her kittens. She entered a stone wall a few yards away, evidently seeking a place of safety for her remaining little one.

Horace W. Ward, Bath, Me.

NATURAL HISTORY NOTES.

Last Friday I saw a curious thing. A workman coming into the shop after his lunch, brought a large ruffed grouse which he claims fell almost into his hands on one of the principal business streets of this city. As far as I could find out, he was walking slowly when he happened to look up and saw the bird falling through the telegraph wires. The bird was warm when I first saw it, so I took this story to be true. Have you or any of your readers ever heard of a similar case?

W. C. Buell, Jr., Troy, N. Y.

Yes, I often hear reports of birds striking telegraph wires in flying, and killing themselves. I have found several birds myself that had met a similar fate.—Editor.

Does any reader of Recreation know thoroughly the habits of crows? The reason I ask is that in this part of Minnesota we have always had an abundance of gray squirrels until this year. Those I now find are old ones, and the crows were never before so numerous. They nest in the same woods that the squirrels do. Does anyone know if crows kill or destroy young squirrels before they are old enough to care for themselves? I have watched closely and have come to the conclusion that they do. Should like to hear from other observers.

W. S. Jones, Albert Lea, Minn.

While going through a blackberry thicket I noticed the vacated nest of a yellow warbler. Struck by its appearance, I drew it from the bushes and found it was 2-storied, so to speak, one nest above another. Opening the lower one, I found the reason of its peculiar construction. It contained a cow bird's egg. Unable to cast it out, and unwilling to hatch it, the warbler had built a second nest on the first, in which she had reared her own brood.

R. Schieb, Akron, O.

I noticed a number of articles in Recreation about the muskrat. I do not think anyone who has ever trapped them could have any doubt about their eating either fish or flesh. I have caught them in traps set for mink, baited with both, and have often seen them eating fresh water clams that they had brought up from the bottom of streams or ponds. I have shot them and found the partly eaten clams and fresh shells at the edge of the ice.

W. J. Cross, Becket, Mass.

Has any reader of Recreation ever seen a gray flying squirrel flying upward from the trees or ground? I have on several occasions watched them and noticed that they always ran up a tree and swooped downward to another. I never saw them fly anywhere near a level, and they climbed a tree not less than 15 or 20 feet to fly to the next.

Amateur, Kelsey, Mich.

September 18th a white deer was shot a few miles from here. It was the first albino deer seen here in many years.

C. F. Dalling, Woodstock, N. B.

It is not too early to begin planning your summer vacation. Where will you spend it? If you expect to camp out or to take a canoeing trip, a tent is the first necessity. I can send you, as premium, one of almost any size you may wish on the basis of one yearly subscription to Recreation for every dollar of the price named in manufacturer's list. Write me for further particulars and begin taking subscriptions at once. The manufacturers have time now to fill orders. If you delay until their busy season opens, your entire vacation may be spoiled by an unavoidable delay in the shipment of your tent. By having everything ready for a prompt start you will enhance the pleasure of your trip tenfold. Send in your club at once and I will do the rest.

An old woman entered a savings bank the other day and walked up to the desk.

"Do you want to withdraw or deposit?" asked the clerk.

"Naw, Oi doant. Oi wants to put some in," was the reply.

The clerk pushed up the book for her signature and said:

"Sign on this line, please."

"Above it or below it?"

"Just above it."

"Me whole name?"

"Yes."

"Before Oi was married?"

"No, just as it is now."

"Oi can't wroite."—Cambridge *Tribune.*

Mother.—"Why, baby, what's the matter?"

Baby (who has been stung by a bumblebee)—"The automobile bug bit me."—Exchange.

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Cumberland,	J. C. Gill,	Mechanicsburg.
Wyoming,	Cyrus Walter,	Tunkhannock.
Tioga,	E. B. Beaumont, Jr.,	Lawrenceville.
"	G. H. Simmons,	Westfield.
Lycoming,	Jas. J. Brennan,	Oval.
"	B. D. Kurtz,	Cammal.
Delaware,	Walter Lusson,	Ardmore
Montgomery,	L. C. Parsons.	Academy.
Bradford,	Geo. B. Loop,	Sayre.
Clarion,	Isaac Keener,	New Bethlehem.
Cameron,	Harry Hemphill,	Emporium.

LOCAL WARDENS IN MICHIGAN.

Ottawa,	W. H. Dunham,	Drenthe.
Kalamazoo,	C. E. Miller,	Augusta.
Berrien,	W. A. Palmer,	Buchanan.
Cass.	Thomas Dewey.	Dowagiac.

LOCAL WARDENS IN VIRGINIA.

Mecklenburg,	J. H. Ogburn,	South Hill.
King William	N. H. Montague,	Palls.
Smythe,	J. M. Hughes,	Chatham Hill.
King & Queen,	R. D. Bates,	Newtown.
Louisa,	J. P. Harris,	Applegrove.
Henrico,	W. J. Lynham,	412 W. Marshall Richmond.
East Rockingham,	E. J. Carickhoff,	Harrisonburg.

LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	S. N. Leek, F. L. Peterson,	Jackson.
Carbon,	Kirk Dyer,	Medicine Bow.
Big Horn,	E. E. Van Dyke,	Clark.

LOCAL WARDENS IN TENNESSEE.

Sumner,	W. G. Harris,	Gallatin
Stewart,	John H. Lory,	Bear Spring.
Robertson,	C. C. Bell,	Springfield.
Montgomery,	P. W. Humphrey,	Clarksville.

LOCAL WARDENS IN NEBRASKA.

County.	Name of Warden.	Address.
Hall,	E. C. Statler,	Grand Island

LOCAL WARDENS IN NEW HAMPSHIRE.

Cheschire,	S. C. Ellis,	Keene.
Sullivan,	G. A. Blake,	Lempster.
"	J. W. Davidson,	Charlestown.

LOCAL WARDENS IN VERMONT.

Rutland,	Wm. J. Liddle,.	Box 281, Fair Haven
Windsor,	F. A. Tarbell	West Bridgewater.
Orleans,	E. G. Moulton	Derby Line
Chittenden,	C. C. Manley,	Melton.

LOCAL WARDENS IN ILLINOIS.

Rock Island,	D. M. Slottard,	12th ave and 17th St.. Moline.

LOCAL WARDENS IN OKLAHOMA.

Kiowa and Comanche Nation,	A. C. Cooper.	Ft. Sill.

LOCAL WARDENS IN IOWA.

Clinton,	D. L. Pascol,	Grand Mound.
Pattawattamie,	Dr. C. Engel,	Crescent.

LOCAL WARDENS IN WASHINGTON.

Okanogan,	James West,	Methow.
Stevens Co.,	Jacob Martin,	Newport.

LOCAL CHAPTERS.

Albert Lea, Minn.,	H. A. Morgan,	Rear Warden
Angelica, N. Y.,	C. A. Lathrop,	"
Austin, Pa.,	W. S. Warner,	"
Boston, Mass.,	Capt. W. I. Stone,	"
Buffalo, N. Y.,	H. C. Gardiner,	"
Cammal, Pa..	B. A. Ovenshire.	"
Carbon Co., Pa.,	E. F. Pry,	"
Charlestown, N. H.,	W. M. Bushwell,	"
Coudersport, Pa.,	I. L. Murphy,	"
Cresco, Iowa.,	J, L. Platt,	"
Davis, W. Va.,	J. Heltzen,	"
Dowagiac, Mich.,	W. F. Hoyt,	"
Evansville, Ind.,	F. M. Gilbert,	"
Fontanet, Ind.,	W. H. Perry,	"
Ft. Wayne, Ind.,	W. L. Waltemarth	"
Hopkinsville, Ky.,	Hunter Wood,	"
Indianapolis, Ind.,	Joseph E. Bell,	"
Jerome, Ariz.,	Dr. L. A. Hawkins,	"
Johnsonburg, Pa.,	W. J. Stebbins,	"
Kalispell, Mont.,	John Eakright,	"
Keene, N. H.,	F. P. Beedle,	"
Lake Co., Ind.,	Dr. R. C. Mackey,	"
Loganpsort, Ind.,	E. B. McConnell,	"
Ludington, Mich.,	G. R. Cartier,	"
Mechanicsburg. Pa.,	Dr. J H. Swartz.	"
New Albany. Ind.,	Dr. J. F. Weathers,	"
New Bethlehem, Pa.,	Isaac Keener,	"
Penn Yan, N. Y.,	Dr. H. R. Phillips,	"
Reynoldsville, Pa.,	C. F. Hoffman,	"
Rochester. N. Y.,	C. H. McChesney	"
St Paul, Minn.,	O. T. Denny,	"
Schenectady, N. Y.,	J. W. Furnside,	"
Seattle, Wash.,	M. Kelly,	"
Syracuse, N. Y.,	C. C Truesdell,	"
Terre Haute, Ind.,	C. F. Thiede,	"
The Dalles, Ore.,	C. B. Cushing,	"
Walden, N. Y.,	J. R. Hays,	"
Winona, Minn.,	C. M. Morse,	"

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The following firms have agreed to give members of the L. A. S. a discount of 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

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Davenport Fire Arms Co., Norwich, Conn. Shot guns, rifles.
Gundlach Optical Co., Rochester, N. Y. Photographic goods.
Blair Camera Co., Rochester, N.Y. Photographic goods.
The Bostwick Gun and Sporting Goods Co., 1528 Arapahoe St., Denver, Col.
James Acheson, Talbot St., St. Thomas Ontario, Sporting goods.
Jespersen & Hines, 10 Park Place, New York City.

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A. A. Anderson, 6 E. 38th street, New York City.
A. V. Fraser, 478 Greenwich street, New York City.
E. S. Towne, care National Bank Book Co., Holyoke, Mass.
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E. H. Dickinson, Moosehead Lake, Me.
Lorenzo Blackstone, Norwich, Conn.
A. L. Prescott, 90 W. Broadway, New York City.
G. S. Edgell, 192 Broadway, New York City.
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J. S. Brown, 241 South 5th street, Reading, Pa.

There are thousands of men in the United States who should be life members. Why don't they join? Will some one please take a club and wake them up?

WHAT THE LEAGUE HAS REALLY DONE.

It secured the passage of the Lacey Law, the most important measure ever adopted in this country for the protection of game, song and insectivorous birds.

It secured the repeal of Section 249 of the New York game laws, which permitted the sale of game in this State at all times, if killed in some other State.

It has detected 6 of the leading hotels and several game dealers of this city in the act of selling game in closed season, and secured from them written pledges to stop violating the game laws.

It has prosecuted and convicted the owners of 2 large restaurants in this city for selling game in close season, and has made them pay their fines.

It detected one large hotel in Syracuse and another in Buffalo in the act of serving game contrary to law, and has secured similar pledges from them.

It has sent 4 circular letters to all hotels, restaurants, game dealers and cold storage houses in the State, advising them as to close seasons on game, and warning them to observe same.

Its officers and detectives are constantly watching the hotels, restaurants, game dealers and cold storage houses in this city and elsewhere, in search of illegal traffic in game.

It has absolutely stopped the sale of game in New York city at all times, except in the open season for killing same.

It has arrested, prosecuted and secured the conviction of 853 men for killing game or song birds illegally in various States of the Union.

It has secured many hundreds of written promises from others, accused of law-breaking, to cease and to obey the laws in future.

It has built up a membership of over 8,000, distributed throughout all the States aand Territories of the Union, and all the provinces of Canada.

It has organized 42 State divisions, which are now in active operation.

It has appointed 52 local wardens in New York, and they have arrested, prosecuted and convicted 107 men for violating game or fish laws.

It has appointed 31 local wardens in Pennsylvania, 14 in New Jersey, 14 in Ohio, 7 in Connecticut, 7 in Virginia, 5 in Wyoming, 4 in Massachusetts, 4 in Michigan, 4 in Tennessee, 3 in New Hampshire, 2 in Iowa and one each in Nebraska, Vermont, Illinois, Oklahoma and Washington, and these wardens have arrested and convicted hundreds of men.

In June, 1899, the League induced the United States Government to issue an order which stopped the California Fish Commission from killing 40,000 to 60,000 seals on the California coast, which had been ordered destroyed.

In April, 1900, the Hon. W. M. Grant, chief warden of the Oklahoma division, seized 6,000 quails at Oklahoma City which had been consigned to Armour & Co., at Kansas City. The shippers were vigorously prosecuted and compelled to pay heavy fines.

In October, 1900, the President of the League brought an action against the American Line Steamship Company for having quails in possession in this city, and one against M. Robbins & Son for selling the birds to the steamship company. The cases were settled out of court, the steamship company paying a fine of $100 and M. Robbins & Son a fine of $1,000.

In April, 1901, Mr. F. E. Mockett, chief warden of the Nebraska division, seized 30 dozen quails which were being shipped illegally by the Armour Company. The case was settled by Armour paying a fine of $5 and signing an agreement not to handle any more game in Nebraska for 10 years.

The League has secured the passage of bills in 16 States to prohibit the sale of game at all times, and in 4 States to prohibit the wearing, having possession or selling of the plumage of song or insectivorous birds for decorative purposes.

It has among its members Hon. Theodore Roosevelt, Washington, D. C.; Hon. Boies Penrose, U. S. Senator, Philadelphia, Pa.; Hon. C. H. Dietrich, U. S. Senator, Lincoln, Neb.; Hon. Joseph F. Johnston, Governor of Alabama; Hon. Miguel A. Otero, Governor of New Mexico, Santa Fé; Hon. W. E. Stanley, Governor of Kansas, Topeka; Hon. DeForest Richards, Governor of Wyoming, Cheyenne; Hon. S. R. Van Sant, Governor of Minnesota, St. Paul; Hon. John G. Brady, Governor of Alaska, Sitka; Hon. W. D. Jenkins, Secretary of State, Olympia, Wash.; Hon. M. Patrie, Secretary of State, Boise, Idaho; Dr. D. C. Gilman, President Johns Hopkins University, Baltimore, Md.; Hon. John F. Lacey, M. C., Oskaloosa, Iowa; Hon. Ben. F. Caldwell, M. C., Chatham, Illinois; Hon. Joseph E. Thropp, M. C., Everett, Pa.; Hon. Jno. H. Small, M. C., Washington, N. C.; Hon. Geo. W Ray, M. C., Norwich, N. Y.; Hon. W. B. Shattuc, M. C., Cincinnati, Ohio; Hon. J. M. Robinson, M. C., Ft. Wayne, Ind.; Hon. Levi P. Morton, ex-Governor, Rhinebeck, N. Y.; Dr. C. H. Merriam, Agricultural Department, Washington, D. C.; Hon. T. L. Woodruff, Lieutenant-Governor, Albany, N. Y.; Hon. Willis Van Devanter, Assistant Attorney-General, Washington, D. C.; Hon. U. B. Hunt, Secretary of State, Indianapolis, Ind.; Capt. R. D. Evans, U. S. N., Washington, D. C.; Capt. Thomas Perry, U. S. N., Washington, D. C.; Hon. R. W. McBride, ex-Judge Indiana Supreme Court, Indianapolis, Ind.; Hon. C. B. Penrose, member Pennsylvania State Game Commission, Philadelphia, Pa., and many other men of national reputation.

Don't forget that the annual meeting of the League will be held in Indianapolis, Ind., February 12th, and that we want a large attendance. Only the officers and chairmen of committees are entitled to vote and act at the day session; but a banquet will be given at night to which all League members will be welcome, and I hope to see several hundred earnest men assembled round the festal board.

Reduced rates will be made by at least one good hotel in Indianapolis, and full information as to this can be had by addressing the Hon. F. L. Littleton, Chief Warden Indiana Division, Indianapolis, Ind.

If you wish to make several of your friends happy give each of them a year's subscription to RECREATION. At least once every month they will think kindly of you.

FORESTRY.

EDITED BY DR B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

TREES FOR THE PRAIRIES.

The following paragraphs, reprinted from *Harper's Weekly*, state correctly the need of forest-planting in the West as a matter of internal improvement and climatic amelioration, to which the States concerned should give their financial aid. It should not, however, be expected that this tree planting can in any way compensate for the decimation of forest resources and deficiency in lumber production of the forest regions. Under the climatic conditions of the plains and prairies, which are not of local but of cosmic origin, the constant winds sweeping over the country will always prevent the development to lumber size and lumber quality of even our best timber trees. Nor should it be expected that the climatic influence will be of a general character. It can necessarily be only of a local, limited character, felt within limited distances of the forest cover; for the mountain ranges, which largely determine the climate of the plains, will always exert a more powerful influence than small plantations.

Every time a severe drought threatens the corn or wheat crop in the West renewed attention seems to be called to the oft-considered and much-discussed question of providing the great central plains with trees to counteract in a measure the effects of the hot, dry winds. The small farmers of Kansas and Nebraska have to a certain extent redeemed their farms from scorching heat and drought by the construction of innumerable windmills to pump up water from the underground reservoirs for irrigation purposes. In wide sections of the West these home-made windmills dot the landscape so thickly that one unconsciously imagines he is in some Pennsylvania oil region, where the derricks and wells characteristically mark the whole country-side.

But excellent as these windmills may prove for irrigation purposes, they are more or less local in their effect, and they are of little general value in staying the disastrous effects of the prevailing hot winds when they blow in midsummer across the extensive acres of growing corn and wheat. Scientists decided years ago that the great hope of the farmers of that section was in clothing the prairies with trees. The United States Forestry Bureau has been making extensive studies and investigations in the matter for a decade past, and the State Agricultural Stations have made independent experiments with trees to obtain reliable data. In Nebraska and Kansas, in particular, the State Agricultural experts of forestry have planted trees in considerable numbers to ascertain the relative effect on agriculture and the species of trees which produce the best results.

It may be decades before the plains and prairies are properly clothed with trees in sufficient numbers to make any appreciable effect on the climate, but that this improvement will eventually be made is almost certain. Vast acreages of the West are unfit for farming, and if forests were planted on this land the climatic effect on the rest of the region would be of great benefit. In Nebraska alone there are nearly 10 million acres of government land that are totally unfit for good farming, and only indifferent for grazing; but most of it could be made to yield good timber trees, which would not only produce a fair profit in time to the planter, but would tend to reduce the disastrous effects of the hot, dry winds of summer.

The Forestry Division of the Department of Agriculture has planted at various times and places in the West a number of species of trees considered the most likely to thrive on the great plains. The soil, climate, and absence of moisture in the summer are effective weapons for destroying the young growths of ordinary trees; and so far the Scotch, Austrian, yellow, and banksian pines have proved the least susceptible to injury from the uncongenial surroundings. From the experiments so far made it is confidently believed that hundreds of thousands of acres of sand hills and prairie land can be successfully covered with these trees.

At the present writing the Forestry Division has a number of experts in the dry regions of the West making careful studies and observations of the question. Their attention will be directed particularly toward the reforesting of the government land in the great prairies and plains. If the millions of acres still owned by the national government could be reforested, the land thus held of little value to-day would in time prove of vast interest to one of the greatest agricultural districts of the world. It is not that this land is needed for farming so much as it is for growing timber. There is good farming land in the West sufficient for all needs of the country for the next 100 years, and its improvement and development by scientific methods of agriculture will be of more value to the owners and the country at large than opening up new tracts through artificial methods of irrigation; but our forests show no excess of production over demand, and their rate of increase is far smaller than the increase in the population and general demand. Here, then, is a profitable opening for State, national, and individual effort, and, with the reforesting, agriculture for the rest of the West will be made less risky and uncertain. The hot, dry winds will be tempered, the moisture of the soil conserved and held for the crops when most needed, and the rains themselves induced to fall more abundantly in summer.

The great treeless regions of the West must eventually yield to systematic planting of the right kind of trees, and then under a system of forest protection and cultivation millions of acres will be forever devoted to the profitable propagation of timber that will be so much needed in the future. The American forestry system is in the formative stage yet; but it is broad and comprehensive enough to include the question of reforesting the Western prairies, so the national calamity of crop destruction in the corn and wheat belt will be almost entirely eliminated. The most successful farming is that in which the uncertainty of production is reduced almost to the point of extinction, and this can be accomplished in the West only when the hot, dry winds have ceased to exercise their present baleful influence. Forestry for the prairies at present seems the most hopeful solution of the problem.

George E. Walsh.

ALASKAN FORESTS.

The first 2 of the volumes which are to record the results of the Harriman expedition to Alaska, undertaken in 1899, came from the press in October, one of the most sumptuously illustrated publications of its kind. Besides the narrative of the journey it contains chapters on the climate, geography, and resources of the country, and among these a chapter on the forests by Dr. B. E. Fernow, who was of the party. Dr. Fernow remarks on the interesting distribution of the different species of forest trees, showing that along the coast, as is to be expected, the flora of the West coast of Oregon and Washington is continued, with one species after another dropping out until only the tideland spruce and the 2 hemlocks remain; and finally at the Western limit on Kadiak island the spruce alone forms the open, park-like forest.

In the interior, on the other hand, the species are those of our Eastern flora, the Adirondack spruce, aspen and birch. Of the commercial value of the Alaskan forest Dr. Fernow does not give glowing accounts. The coast forest, about 20,000 square miles in extent, mostly found on the islands of the Alexander archipelago, contains only a small quantity of the valuable Alaska cedar, while the largest proportion is hemlock, with the spruce a close second. These 2 species are not very valuable, even where best developed in the more Southern coast region, and here they are poorly developed, knotty and branchy, besides difficult of access; so that it pays better, even now, to import lumber from the Puget sound country, notwithstanding the efforts of local sawmills.

The interior is described as an arid region, with temperature extremes from 60 degrees below zero to 112 degrees above, the forest growth mostly stunted and open, occurring in patches or islands and along river courses, as we are accustomed to see it in the arid and semi-arid regions of the Rocky mountains. The economic value of these scanty resources can only be local, but they are of highest importance to the development of the mining industry.

Curiously enough, in the same volume, only a few pages removed, Mr. Henry Gannett, the geographer of the U. S. Geological Survey, uses the following language with regard to these same forest resources: "The interior of the territory is forested, mainly with spruce, as far North as the valley of the Koyukuk and as far Westward as the delta of the Yukon. In this enormous region there must be a great quantity of coniferous timber, sufficient to supply our country for half a generation in case our other supplies become exhausted."

Neither of the 2 writers saw that part of the country, but report second-hand information. Did the geographer or the forester interpret conditions and statements of explorers correctly? Dr. Fernow at least states his sources of information. Regarding the coast forest, the 2 authorities also differ. Dr. Fernow considers hemlock the main timber and does not think either spruce or hemlock of good quality. Mr. Gannett says:

"The timber is mainly, indeed almost entirely, Sitka spruce. There is some hemlock at higher levels. . . . The spruce is large, fine, judged by Eastern standards."

Who is likely to have seen more accurately and to have a judgment on the market value of a forest?

SUCCESSFUL FOREST PROTECTION.

Pasadena, Cal.—Forest Supervisor E. B. Thomas says that about 25 fires were started in the San Gabriel forest reserve last season, but in almost every case they were checked in their incipiency, and little damage resulted to the covering of the mountains. Twenty-five rangers are employed in the reserve, an increase of 10 over last year, and they are maintaining a strict patrol of their territory, one of their duties being to keep a record of every person who passes through or to the interior of the reserve. These persons are cautioned by the rangers to be careful in the building of camp fires, and in no case to leave such fires burning after abandoning a camp. Flagrant disregard of this admonition has involved a party of 3 men in a serious difficulty. They were cautioned by the rangers in the customary way, but on leaving camp neglected to quench their fire. As the names of the men were known, warrants were issued against them and are now in the hands of the United States Marshall for service, and the men will soon be taken into the Federal court for trial. The extreme penalty for the offense charged is one year's imprisonment or a fine of $1,000, placing the offenders in a serious dilemma.

Another order recently issued forbids the carrying of shot guns int othe government forest reserve. The enforcement of that order is a source of much discomfiture to hunters, but it is considered necessary for the protection of the forests. The reason for the order is the danger from ignited gun wads, which fall into the brush and smoulder sometimes for hours before breaking into flames. A fire was started in this manner but a few days ago near Monrovia, and only the prompt action of the rangers prevented a destructive conflagration. Persons carrying shot guns are informed by the rangers that such firearms must be relinquished to the government agents; failure so to turn them over barring the hunter from the reserve.

Little trouble is found by the rangers in enforcing these regulations. Intelligent persons recognize their justice, but an obstreperous individual is encountered occasionally, and harsh treatment becomes necessary. All rangers wear government badges, making their identification positive, and their word is law in the reserve.—California Exchange.

REDWOOD CUTTING SHOULD BE CONTROLLED.

According to a report received from California, a company has been formed on the Pacific Coast, with a capital of $15,000,000, for the purpose of controlling the redwood market. There are not many lumber merchants in the East who handle this product of the Western forests extensively. It is shipped from California to Japan, China, Hawaii and England. In those countries it is used for building purposes. Great quantities of shingles are made from the wood, and it is used for coffins, door jambs, rails, wainscotting, window sashes and similar house fittings.

"The wood should be more popular than it is," said a dealer, "because the best quality is cheaper than the best pine. It would be more in demand if the dealers in the Far West paid more attention to the Eastern market, but they prefer to sell to China and Japan."—*Exchange.*

If the trust is formed for the purpose of managing the remnant of the limited supply of redwood conservatively, we welcome it. Even if it means raising prices it would be a proper movement because such rise of price is necessary to make conservative lumbering possible. The present wasteful methods by which hardly 30 per cent. of the wood in the forest reaches the market are at least in part chargeable to the low price for the material, which does not permit a closer utilization.

PROFESSIONAL FORESTERS INCREASING.

The Philippine Forestry Bureau has made a raid on the professionally educated foresters in this country. The New York State College of Forestry has lost 2 of its senior students, Messrs. Clark and Klemme, who were sufficiently advanced in their studies to pass the Civil Service examination, and Mr. Hagger, its forest manager from the College Forest, and its first graduate, who leaves a position with the New York State Forest, Fish and Game Commission. Captain Geo. P. Ahern, the chief of the Forestry Bureau, also secured the services of 2 other foresters, Messrs. Griffith and Hareford, and of Mr. S. N. Neely, a civil engineer, formerly employed by the United States Forestry Division in timber and physics work, to conduct a wood-testing laboratory. The crop of foresters promises to grow more rapidly in the future, the New York State College of Forestry having this year, inscribed 38 students, and the students in the Yale Forest School, showing an increase of 22.—*Exchange.*

FOREST SUPPLIES.

It is estimated by the superintendent of forest rangers of the Province of Quebec that the spruce forests of the Province aggregate 144,363,000 acres and that the consumption denudes 830,750 acres annually, so that if no increase in the consumption took place it would take 173 years to exhaust the supply. Inasmuch, however, as the spruce forest renews itself in 15 to 25 years there would seem to be enough timber in Quebec to supply any probable demand practically forever.—Canadian paper.

Such false statements as the above, which go the round of the papers, retard the application of forestry principles in the use of our remaining forest resources. The statement that a spruce forest renews itself in 15 to 25 years is incorrect. The trees that the lumberman is satisfied to cut are mostly over 150 years old. What is meant is that after 15 or 25 years some of the trees that the lumberman had left because they were too small have increased their diameters sufficiently to satisfy him; but there is no renewal or reproduction to make good the removal.

MORE FOREST RESERVATIONS.

The forest reservation policy has found entrance into the State of Michigan, in spite of the defeat of the legislation which attempted to introduce it last winter. Mr. D. A. Blodgett, of Grand Rapids, has given to the State Forest Commission 35,000 acres of timber land in Crawford and Roscommon counties, which the Commission has accepted and expects to handle as a forestry reserve. This tract adjoins other land which has come into possession of the State for non-payment of taxes, and if the lobby against the State devoting this land to forest purposes can be defeated a State forest reservation of 1,000,000 acres solid can be established in the central part of the peninsula.

BALLADE OF LITERARY LETTERS.

Of old it was an easy thing
  To write a letter to one's dear,
To line the words we felt, and cling
  To simple sentiments and clear;
  But times are sadly changed, we hear—
Love grows enamored of the mint;
  We pen our lines with care and fear—
Our letters must be fit to print.

No more in our accustomed way
  We say the tender things we mean;
Our letters may be made to play
  A part in book or magazine.
  Ah, me! They once by one were seen—
We did not have to hedge or hint;
  But now the public comes between—
Our letters must be fit to print.

Whene'er the lean wolf snarled of old,
  A man sought friends without demur,
Or left his watch in Shylock's hold,
  Or starved or stole, as he'd prefer;
  But now he takes the notes of Her,
The honeyed lines she did not stint,
  And hies him to a publisher—
Our letters must be fit to print.

L'Envoi.

Sweetheart, henceforth with words alone
  Shall Love his fond expressions tint.
It grieves me sore, yet must I own
  My letters are not fit to print.

—Theodosia Garrison,
in October Century.

PURE AND IMPURE FOOD.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

COOKING IN WESTERN COWBOY CAMPS.

Discussing the camp cookery of the Western plains, H. A. Crafts in a recent magazine says: "A Mexican, with a grimy sack of flour, a little water, a little baking powder and a fire of sage brush, can in a few minutes prepare most excellent biscuits. The Mexican makes his biscuits with the simplest kind of a cooking outfit.

"Did he have a bread pan? Not at all. Such a thing would be a mere superfluity. No! He simply unfastened that dingy sack of flour from his saddle, placed it squarely upright on the sod, and rolled the top of the sack nicely down until it made a rim around the edge of the flour. Then he scooped out a hollow in the flour and poured in some water. The quantity of water determined the number of biscuits he proposed to bake, and no more water was added in the process of mixing, because that would probably spoil the whole mess. Adding the remaining ingredients, he began to stir the mixture with a spoon, gradually working in the flour from the edges. When of the desired consistency, he took the mass between his hands and molded it. Then, replacing it in the sack, he proceeded to cut from it sufficient dough to make a biscuit. That he deftly molded in turn, and placed in his frying pan, already hot and greased with bacon fat. When the pan was full he tilted it in front of his fire, and soon had a panful of beautiful biscuits, white within and browned to a turn on top.

"I am told by persons of experience that the novice at open-air cooking nearly always commits the error of using too much fuel. In consequence, there is an excess of heat both in the cooking and the cook. It is surprising how little fuel the experienced person needs to cook a fair meal. A few buffalo chips, a handful of sage brush or pine fagots will suffice. One secret of this person's success is the cool and deliberate manner in which he works. The amateur is usually in a great hurry, and thinks he can best accomplish his task by putting on steam. Disaster follows in his wake, and even the tough stomach of the plains rises against his abortive attempts at cookery; whereas the man who knows his business uses no haste, little fuel and does not place his viands to cook until his fire has burned nearly down to coals.

"The cooking outfit of the round-up is usually a well equipped affair, especially as regards provisions, for the Western cattleman is a generous feeder. The life of a cowboy is exacting, so he is given all the good, wholesome food he cares to eat. The food must be well cooked, too, so the cook on the round-up must be a competent person. He is well paid, getting $40 to $50 a month as wages. The camp larder is well supplied with canned vegetables and dried fruits. Canned fruits are too bulky to carry on the round-up. The best of fresh beef is at all times at hand. Beef is cooked largely into soups and stews. Beef and tomato soup is a favorite dish with the cowboy. Stewed fruit is used in large quantities. It is also cooked into pies, puddings and dumplings; but it is greatly relished in its simple form, and it is no uncommon thing to see a cowboy eat a quart bowlful at one sitting. It is especially esteemed for its dietetic qualities.

"The camp changes location daily, as the round-up moves across the country. If possible, it is located near timber. To begin with, the cook secures 2 logs of green timber, according to the size of the outfit. These logs he places on the ground side by side and about 8 inches apart. Then he builds his fire of dry stove wood between the logs. If the outfit is destined to traverse a treeless country, a supply of stove wood is taken along in the camp wagon, and instead of cooking over a pair of logs a narrow trench is dug in the ground and the fire built in that. The cooking is done in large pots, pans and kettles, with a Dutch oven added.

The cook turns out about 3 'o'clock in the morning. No matter what the weather may be, it must be done. In wind storm or rain storm breakfast must be served. About 4 o'clock he wakes the remainder of the crew. The sleepy cowboys turn out reluctantly, because their sleep was sweet and their bodies tired from much hard riding. They souse their faces in buckets of cold water. If there is a spring or creek near, they prefer to perform their ablutions there. Then they saddle their broncos; after which there is a call to breakfast. Each cowboy is supplied with a knife, fork, spoon and a large tin plate. Of course, there is a good sized cup of coffee, for that grateful beverage is drunk in unlimited quantities in the cow camp. He has a plate or 2 for side dishes. Then each cowboy marches up to the campfire, where there is a smoking row of pots and kettles, and helps himself to what he wants. He retires and allows another to take his turn. After supplying themselves they all sit a short distance from the fire in a picturesque group on the ground and partake of their morning meal. That is the only regular meal of the day, as they come in from the range at all hours until sometimes late in the evening. The cook replenishes his pots and kettles and, as the cheap restaurant man says, gives 'meals at all hours.'

"Fresh, hot coffee is kept constantly on tap, and is largely indulged in by the tired cowboys as they come in from a long, hard gallop. No cheap grade of coffee is furnished, either, but the best the market will afford. This is the only stimulant permitted on the round-up, save in case of sickness.

"Occasionally the bill of fare is varied by the addition of some kind of wild fowl or by jack rabbits which the cowboys shoot while out on the range. The mining prospector in the mountains has a much better opportunity to indulge in the luxury of wild game and fish. He may shoot deer, elk, bear, mountain sheep, rabbits, grouse, sage hens, etc. The streams are also filled with trout, so that the mountain bill of fare may be made superior to that of the plains."

FOOD SUPPLIED DURING THE SIEGE OF MAFEKING.

The following statements regarding the food supplied during the siege of Mafeking are included in a report by General R. S. S. Baden-Powell:

"Early in the siege I took over all merchant stocks and put everybody on rations. Beginning on the usual scale, I gradually reduced it to the lowest that would allow of the men being fit for duty. During the latter part of the siege, no extras of any kind were obtainable. All lived strictly on the following scale:

	At first.	Latterly.
Meat	1 pound	¾ to 1 pound
Bread	1 "	5 ounces
Vegetables	1 "	6 "
Coffee	1-3 ounce	1-3 "
Salt	½ "	½ "
Sugar	2 "	...
Tea	½ "	...
Sowens	...	1 quart

The first ration was calculated to furnish 142 grams protein, with a fuel value of 2,517 calories; the latter, 149 grams protein and 2,722 calories.

"We had a large stock of meat, both live and tinned. For livestock, we had to open up a wide extent of grazing ground. We ate the fresh meat first in order to avoid loss from enemy's fire, failure of grass and water, lung sickness, etc. The tinned meat we stored in bomb-proof chambers, and kept as reserve. During the last 2 months, we were on horseflesh 3 days a week. Our stocks of meal were comparatively small, but we had a large supply of forage oats. Those we ground into flour, and fermented the residue into sowens, a form of porridge. The remaining husks went as forage to the horses. Fresh vegetables were largely grown within the defences, and for a greater part of the siege formed a regular portion of the ration.

"The cost of feeding the troops was 1s. 3d. per ration, or, with fresh vegetables, 1s. 6d.; about 3d. below the contract price in peace. Civilians paid 2s., and women in the laager 1s. 2d. All liquor was taken over and issued in 'tots' to the troops on wet nights. This, I think, saved much sickness.

"For the natives, we established 4 soup kitchens, at which horse stew was sold daily, and 5 sowen kitchens. Natives were all registered, to prevent fraud, and bought rations at 1 quart per adult, and 1 pint per child, at 3d. a pint. Defence watchmen, workmen, police, etc., and certified destitute persons were given free rations. The kitchens so managed paid their own expenses.

"Our master baker made up our forage oats into a good form of bread. The oats were winnowed, cleaned, kiln dried, steam sieved twice, and made into bread in the usual way, with a small admixture of Boer meal."

Regarding sowens, General Baden-Powell says: "This is a form of porridge, made from the fermented bran of oats after the flour has been extracted for making bread. One hundred pounds of bran in 37 gallons of water give 33 gallons of sowens. On this we fed both natives and whites. We had 5 sowen kitchens, each capable of producing 800 gallons daily. It was sold at 6d. a quart to those not entitled to it as a ration.

"The horses which we used for meat were, as a rule, so poor in condition that we found it best to cut off the flesh from the bones and mince it for issue as a ration. The remainder of the carcass then went to the soup kitchen. The mince was mixed with spice and saltpetre, and made up into sausages, the intestines of the same animals being used for sausage skins. The meat thus treated lasted longer, and was more palatable."

BLANCHING CELERY.

Celery is blanched to deprive it of its natural green color and of certain bitter properties, thus rendering it more palatable. The desired end is attained by the exclusion of light from the stalks. All are familiar with the fact that plants which grow in the dark are white or nearly so. If grass is accidentally covered with a board or stone a few days it turns yellow, that is, it blanches. Celery bleaching is usually accomplished by heaping earth against the plants, nearly to the tops of the stalks in the trenches or beds where they are grown. This keeps the light from the plants, but does not stop their growth. Boards about a foot wide are also used for excluding the light. They are leaned against the plant on either side of the row and held in position by wire hooks, cleats or other means. Drain tiles and stiff wrapping paper, are sometimes used for covering the celery in such a way as to secure bleaching, as is also moss, especially in Florida. Sometimes the plants are set so closely together that they shade and bleach themselves. This is the method employed in the so-called "new celery culture," which is simply the growing of varieties with self-blanching tendencies in rows 8 to 12 inches distant either way and banking or boarding up the outside rows only.

At the Pennsylvania Agricultural Experiment Station a test was made of the relative merits of blanching with earth and with boards. In some cases celery blanched with boards was ready for market earlier than that blanched with soil; but the celery so blanched was decidedly inferior, and, as a rule, was long, slender, pithy and bitter, while that blanched with soil was exceedingly large, crisp and tender.

In experiments at the New York Cornell Agricultural Experiment Station, on forcing celery in the greenhouse for the early market, all the usual methods of bleaching were tried, but without success. When, however, the plants were wrapped with a thick, hard wrapping paper with an almost "sized" surface, the bleaching was successful. By this method "the stalks were brought together and tied and a width of paper reaching to within 2 or 3 inches of the tops of the leaves was rolled tightly about the plants. As the plants grew, another width of paper was rolled about the first, and again, reaching nearly the top of the plant." Two applications of the paper were found to be sufficient. From a month to 6 weeks were required to bleach the celery by this process in a cool house in April and May.

SOME EUROPEAN FOOD CUSTOMS.

Discussing the foods of foreign lands, a writer in a recent magazine states that in Europe many families at Easter partake of lambs roasted whole and stuffed with truffles and pistachio nuts. This dish is universal in Turkey, and is seen in the street booths, ready to carve into portions.

In France and Germany all vegetables are well cooked, including carrots, cauliflower, celeriac, cardoons, artichokes, morels and cepes (varieties of mushrooms), and string beans.

The chicken stew with cream and paprika is peculiar to Hungary.

In Norway will be found anchovies and caviare, salmon and game, including reindeer. Norwegian caviare has cloves in it and is not quite so fine as a brand of black caviare which is made in Hamburg. Ptarmigan, or white grouse, is baked in earthenware, with wine and spices to extract its rich flavor. Reindeer will be found equal to venison. Rod grode, a jelly of currants and sago, is the most popular Norse dessert. Salads of red herrings, anchovies and potatoes are indigenous to Norway and Sweden.

In Russia the sterlet and sturgeon are found, the finest fishes that swim. The latter is caught in the Volga and in the Caspian sea, and its roes are made into caviare. Sturgeon is braised in champagne and offered to royalty. The capercailzie, also found in Scotland, flies over the estates of princes and, when brought low, is a delectable substitute for turkey. Russia is the country of zadzouska, or cold appetizers; a table covered with salads, sandwiches and pickles is spread at the doorway of every dining-room of pretension. The greatest variety and ingenuity prevail. Bears' paws, stewed with wine and bacon and vegetables, is a dish popular with sportsmen. Borscha, a soup of beets, is dear to all classes.

A yearly subscription to Recreation furnishes one of the most delightful, instructive and entertaining presents you can possibly give a man or boy who is interested in nature, in fishing, shooting, amateur photography; or, who is fond of the woods, the fields, the mountains, the lakes or the rivers.

Many of the presents which people give their friends afford pleasure only for a few days, or weeks. A subscription to Recreation means solid comfort a whole year. It reminds your friend 12 times during the year of your kindness and generosity. There are many men and women who for 5 years past have annually sent in long lists of names of friends, accompanied with a check, in order that these friends might be made happy a whole year. Would it not be well for you to adopt this plan?

Try it and see how grateful the recipient will be.

"Is your husband going West on the advice of his physician?"

"No; on the advice of his lawyer!"—Exchange.

EDITOR'S CORNER.

SUBSCRIPTION RECEIPTS FOR 4 YEARS

Read the deadly parallel columns:

	1895.	1896.	1900.	1901.
January ...	$379	$723	$3,205	$3,903
February ..	256	693	2,151	3,267
March	300	1,049	1,919	3,710
April	342	645	1,570	2,760
May	292	902	1,377	2,303
June	307	770	971	2,016
July	345	563	854	2,000
August	306	601	1,262	2,245
September .	498	951	1,464	1,940
October ...	438	969	1,842	2,227
November .	556	1,054	2,060	2,570
December .	652	1,853	4,742	4,981
	$4,671	10,773	23,741	33,922

A gain of $10,181 over 1901. Not so bad, when you recall that Paddy Marlin has spent at least $100,000 trying to kill RECREATION.

If you doubt the accuracy of these figures remember you can see the letters that brought all this money any day, if you will call here.

Office hours: 4 a. m. to 10 p. m.

PRESIDENT ROOSEVELT FAVORS GAME PRESERVES.

The following letter is self-explanatory:

THE LEAGUE OF AMERICAN SPORTSMEN,
OFFICE 23 W. 24TH ST.,
NEW YORK, Oct. 29, 1901.

To His Excellency, Theodore Roosevelt,
President of the United States,
Washington, D. C.

Dear Sir: I beg to suggest that in your annual message to Congress you advise and urge the enactment of certain laws of which we are in urgent need for protection of American wild animals, birds and forests.

Among these measures I respectfully call your attention to the need of a law making all the Western forest reservations game preserves, in the same sense and under regulations similar to those in force in the Yellowstone National Park.

We have several regiments of cavalry that must be maintained somewhere. One company of each regiment could be stationed on each of these reservations to do scout and police duty. This would keep men and horses in splendid condition at all times. In addition to these, 10 or 12 citizen scouts should be employed for each preserve; and this would be practically the only expense the Government would have to incur in maintaining these forests as game preserves.

Another thing the Government should certainly do is to purchase the Allard herd of buffalo, and maintain it for at least a long term of years, on the range it now occupies. The animals could be bought at a reasonable price and the grazing privilege could be leased from the Flathead Indians at a nominal sum per year. The increase of the herd could be distributed among city parks, zoological societies and private owners. Thus the species could be perpetuated in this country for all time to come.

A liberal appropriation should be made to carry out that provision of the Lacey law which authorizes the Secretary of Agriculture to engage in the propagation and distribution of game birds.

I need not take up your time with arguments as to the urgent need of these measures. No man is more thoroughly familiar with the situation than you are, and anything you might say to Congress on the subject would have greater weight than the same words would have had if uttered by any one of your predecessors, because every public man knows your interest in the cause of game protection.

Hoping you may see fit to adopt these suggestions, I am

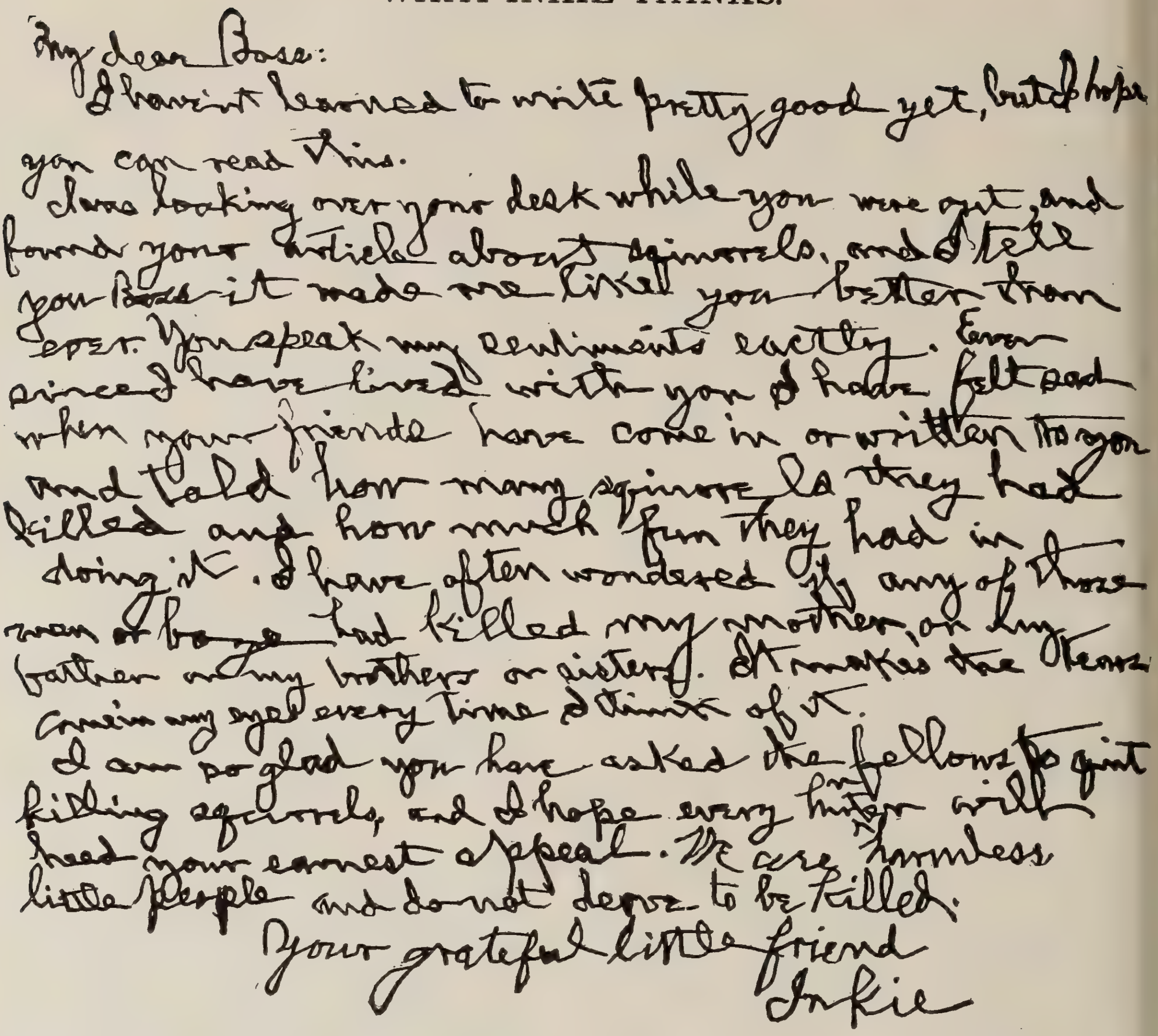
Yours respectfully,
G. O. Shields, Pres.

Here is what the President said about it in his annual message:

> Certain of the forest reserves should also be made preserves for the wild forest creatures. All of the reserves should be better protected from fires. Many of them need special protection because of the great injury done by live stock, above all by sheep. The increase in deer, elk, and other animals in the Yellowstone park, shows what may be expected when other mountain forests are properly guarded. Some of these areas have been so denuded of surface vegetation by overgrazing that the ground-breeding birds, including grouse and quails, and many mammals, including deer, have been exterminated or driven away. At the same time the water-storing capacity of the surface has been decreased or destroyed, thus promoting floods in times of rain and diminishing the flow of streams between rains.
>
> In cases where natural conditions have been restored for a few years, vegetation has again carpeted the ground, birds and deer are coming back, and hundreds of persons, especially from the immediate neighborhood, go each summer to enjoy the privilege of camping. Some, at least, of the forest reserves should afford perpetual protection to the native fauna and flora, safe havens of refuge to our rapidly diminishing wild animals of the larger kinds, and free camping grounds for the ever-increasing numbers of men and women who have learned to find rest, health and recreation in the splendid forests and flower-clad meadows of our mountains. The forest reserves should be set apart forever for the use and benefit of our people as a whole, and not sacrificed to the shortsighted greed of a few.

Some important measures, looking to these ends, will be introduced in Congress at an early date, and all League members will be asked to aid in securing their passage.

WHAT INKIE THINKS.



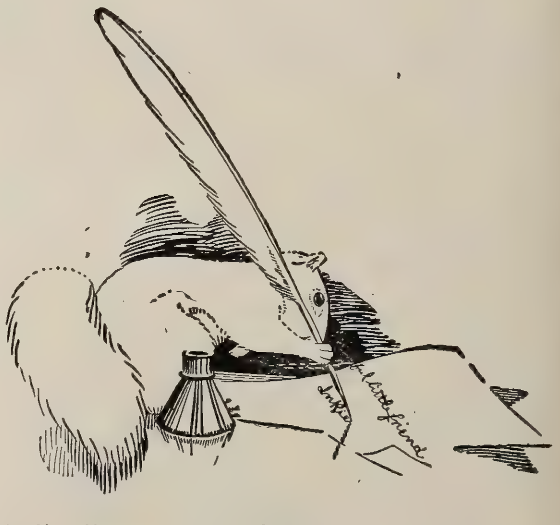
My dear Boss:

I havin't learned to write pretty good yet, but I hope you can read this.

I was looking over your desk while you were out, and found your article about squirrels, and I tell you Boss it made me liked you better than ever. You speak my sentiments exactly. Ever since I have lived with you I have felt sad when your friends have come in or written to you and told how many squirrels they had killed and how much fun they had in doing it. I have often wondered if any of those men or boys had killed my mother, or my father or my brothers or sisters. It makes the tears come in my eyes every time I think of it.

I am so glad you have asked the fellows to quit killing squirrels, and I hope every hunter will heed your earnest appeal. We are harmless little people and do not deserve to be killed.

Your grateful little friend
Inkie



Last fall 2 contemptible game butchers were arrested by Nelson Yarnall, his brother Silas Yarnall, and Jack McCabe in the Wind River country, charged with killing elk for the teeth. The teeth hunters were taken before Richard Green, Justice of the Peace at Dubois, Wyo., where one of the men, Rudolph Rosencrans, pleaded guilty to the killing of 26 elk, and was fined $25 and costs, the total amount being $38.80. The other butcher was allowed to go free. The Wyoming law provides a minimum fine of $25, and a maximum fine of $100 and imprisonment for 6 months for the crime with which these men were charged, and it is a shame and disgrace to the State of Wyoming that a man who would release a confessed culprit such as Rosencrans on so light a punishment, should be allowed to occupy the position of a magistrate. At this rate Justice Green seems to figure the value of a bull elk at about $1.49! I trust Justice Green's neighbors will see to it that when his term of office expires he shall be allowed to retire to private life.

The Betz herd of bristle backs made their usual cruise to Carolina last fall, returning to Philadelphia in December, with 840 ducks and geese hanging about the rigging of their yacht. As usual these men had themselves and their yacht photographed, and certain of the Philadelphia papers published the pictures, with the ancient Philadelphia style of laudation.

The sportsmen of this country could do the cause of game protection an immense service by invariably writing the editors of papers that eulogize game hogs and condemning the aforesaid editors in vigorous and emphatic English. The daily papers print such articles and pictures for revenue only, and if they could be made to understand that they displease more people than they please by displaying such disgusting pictures and comments, they would quit it. Gentlemen, it is up to you to stop this custom of patting game hogs on the back.

It is estimated that 5,000 deer were killed in the Adirondacks last fall, and that 23 of the men who were hunting them were either killed or wounded. This record should prove a decided advantage to the deer in that country. It would seem that sensible men would not care to go in there to hunt next year. Any man of courage is willing to go into battle and take all kinds of chances of being shot when there is an enemy in front of him; but I can not understand how any man would be willing to be shot full of holes for the mere sake of killing a timid, inoffensive deer. One thing is certain; some one must devise a bullet-proof armor for hunters, or else men must quit hunting in the Adirondacks and in Maine.

The 2 beautiful snow pictures published on page 8, of January Recreation, were made by Mr. A. D. Richmond, Grand Rapids, Mich., and should have been credited to him instead of to Mr. D. H. Darling. The prints were sent in by Mr. Richmond some 2 years ago but unfortunately his name and address were not written on them. At a subsequent date Dr. Darling sent me a series of similar pictures, and a letter with them, which was printed on page 32, of January Recreation, and I supposed when I sent Mr. Richmond's pictures to the engraver, that I was sending those made by Mr. Darling. Both series of views were equally good, and I deeply regret that the lines should have become snarled in this way.

The following additions have been made to the Recreation group in the New York Zoological park since last report:

C. D. Brown, Rutherford, N. J.,
1 Mink.
4 Black-crowned night herons.
4 Yellow-crowned night herons.
Melville Chapman, Rutherford, N. J.,
1 Screech owl.
Miss Doane, Waterlily. North Carolina,
1 Black duck.
Roy A. Latham, Orient Point, L. I., N. Y.,
1 Loon.
1 Pied-billed grebe.
Francis J. Rauh, No. 522 E. 141st St., N. Y. C.,
1 Opossum.

HOW IT AFFECTS US.

The editor's raving and tearing his hair,
The business manager's sunk in despair,
The poet is crazy, the artist has struck,
The boss of the press-room is running amuck,
The bookkeeper's sick, the stenographer's sad,
The office boy's blue and the porter is mad;
His reckless profanity isn't reproved
For we feel the same way now the office is moved.

The unanswered letters securely repose
In some hidden place that the Lord only knows;
We write with a pencil, for no one can think
What has become of the bottles of ink.
The ads for the paper have all disappeared
And if we can't find 'em the issue is queered.
The types and the cuts are all battered and grooved,
They're not fit to print, now the office has moved.

The painters are working right over our heads,
Our desks are bespattered with purples and reds;
The chink of the gas-fitter's hammer we hear,
The carpenter hammers away by our ear.
It will be very nice by and by, we'll allow,
But what worries us is the here and the now.
We know when it's settled 'twill be much improved,
But Lord! what a mess now the office is moved.

—Exchange.

Printer: How many copies of that book do you want me to print?

Publisher: We are advertising advance orders for 100,000, aren't we?

"Yes."

"Well, print 600. Let's see how it goes."
—Exchange.

A fond mother, hearing that an earthquake was coming, sent her boys to the house of a friend in the country. She immediately received the following telegram: "Take your boys away, and send along the earthquake."

PUBLISHER'S NOTES.

DEER HUNTING IN ONTARIO.

The Grand Trunk Railway System announces that the deer hunting season in Ontario resulted most satisfactorily to the hunters who went into that district during the open season of 1901. Though complete information with regard to the number of licenses issued this year has not yet come to hand, it is estimated that over 5,000 licenses were issued; and hunting parties and others estimate the deer killed to be about one and a half deer to each hunter. This would make a total of 7,500 deer killed. It is somewhat marvelous how the stock of deer keeps pace with the number killed, but it seems that each year they are becoming more numerous, and there is an increase instead of a diminution. This is accounted for by the shortness of the open season, which runs from November 1st to 15th, and by the strict prosecution by the Ontario Government of anyone transgressing the laws. The wanton slaughter which, no doubt, would have prevailed had hunters been allowed to kill at their pleasure has thus been prevented to a great extent, and one of the best heritages of the public has been saved. This year the Canadian Express Company alone carried 2,372 deer, which is an increase over the season of 1900 of 878 deer, the total weight of these shipments amounting to 236,637 pounds. All these shipments were made from points located on the Grand Trunk Railway, the largest number of carcases being taken out of the Magnetawan river region, the Muskoka lakes district and points on their Northern Division North of Huntsville. Of course, this is not a criterion of the number that are killed, as this does not include those killed by settlers, Indians and half breeds and by those hunters who do not have to express their deer to their homes; nor the wounded deer which get away and die; nor those killed and eaten by the 5,000 hunters and their dogs during the 2 weeks they are in the woods. Taking all these into consideration, there could not have been less than 8,000 or 9,000 deer killed during the season of 1901.

SUCCESSFUL SHIPMENT OF LIVE DEER.

Nelson, New Zealand,

Mr. Charles Payne, Wichita, Kan.

Dear Sir—I owe you an account of the journeyings and unqualified success attending the importation of the 5 Virginia deer purchased from you. First of all, I presume you railed them from Kansas to 'Frisco. Thence they had a 3 weeks' boat journey to Auckland, when they were transshipped to the Quarantine, where they remained exactly 2 months, and I believe in a none too large enclosure. From Quarantine they were shipped for a 4 days' journey to Nelson. On account of the extreme roughness of the weather we detained them here a week and then shipped them in a small boat to Collingwood, the most isolated part of this Province, where they are doing well. The necessary period of quarantine is 60 days, but on account of our deer shooting season being open at the time we thought it best to keep them out of harm until the season was over. Their appearance on arrival here was more than excellent. Sleek, and with magnificent coats, they were the admiration of all. Such a success, after all the knocking about they have had, would lead me to believe that you could send animals successfully to the uttermost ends of the earth.

Thanking you for what you have done for us, I am, Yours faithfully,

J. R. Macdonald, Secy.

A NEW FOLDING STEREO.

The Blair Camera Company, Rochester, N. Y., has issued a new catalogue of the Hawk-Eye camera, which should be in the hands of every amateur photographer. A new field of work for amateurs is suggested in this little book. On page 8 are a cut and a description of a Stereo camera which makes pictures of the usual and popular size for use in the stereoscope, and which sells for $25. This camera is provided with an excellent double lens and double bellows, and yet folds up into so small a space it can be carried in an overcoat pocket, or in a small valise. A good stereoscope can be bought at a surprisingly low price nowadays, and anyone familiar with the power of these instruments knows how greatly a picture may be improved by making it double, and then looking at it through stereo lenses.

Send for a copy of this new catalogue, and when you get it, study this stereo Hawk-Eye carefully. The company will send you some sample views made with this instrument, and they will certainly prove of great interest to you. When you write, please mention RECREATION.

THE OLD STILL NEW.

The calendar season has returned, and among the most notable samples of that class of work that have yet come to hand is the one from E. I. DuPont de Nemours & Co., Wilmington, Del. This company was established a little over 100 years ago, and the present calendar is issued as a centennial souvenir. An historical insert goes with this calendar, giving a brief history of the building up of this great industry and some interesting pictures of events in which DuPont powder has figured. These are Perry's victory on Lake Erie; a picture of a typical Indian warrior; a primitive coal mine and a modern battleship.

I am authorized to say that only a limited edition of this calendar has been issued, and that it will be sent free, together with a copy of the historical chart, to persons mentioning Recreation, as long as the edition lasts, but that preference will be given to those who enclose 3 cents for postage.

A cut of this calendar is shown on another page of this issue.

ONE IN A HUNDRED.

Messrs. N. W. Ayer & Son, the Philadelphia promoters of advertising, have issued their 1902 calendar. As usual, the background, and main sheet, of this calendar is an art work, enhanced in beauty by the tasteful colors of the printer. The 12 sheets containing the dates of the months have a restful, dark, green background, the large figures in white catching the eye at a great distance. In each sheet are epigrammatic sentences bearing on the possibilities of business during the year. This calendar is one in a hundred for artistic beauty and real usefulness. The demand is always great, and whoever would have a copy should sent 25 cents before the edition runs low. This is a merely nominal price to cover the cost of printing, handling and postage. Address N. W. Ayer & Son, Chestnut and Eighth streets, Philadelphia.

TAKE CARE OF YOUR DOG.

Don't fail to read the advertisement of the Polk Miller Drug Co., appearing in another portion of this issue. For 3 cents in stamps they will send you a revised edition of Polk Miller's book on "Dogs—Their Ailments—How to Treat Them," including a pedigree blank for which they make no charge. This book is invaluable to every dog owner, inasmuch as it describes accurately the various symptoms accompanying the more frequent ailments with which dogs are afflicted. More sick dogs have been made well by the timely use of "Sergeant's Dog Remedies," the leading line of prescriptions manufactured by this firm, than possibly any other medium in existence. Polk Miller will cheerfully answer any inquiry in regard to his preparations, or as to the ailment with which your dog may be afflicted.

In a recent article on the growth of traffic on the New York Central Railway, the Rochester Herald says, "The New York Central may well be called the thoroughfare of the nation."

This statement was brought out by the last census, which shows that of the people living in cities of 8,000 or more inhabitants, more than one-half live along the New York Central lines; and of the people living in cities of 100,000 or more inhabitants, two-thirds live along the New York Central lines.

These and other startling figures are given in No. 13 of the "Four Track Series," of which a copy can be obtained by writing to Mr. George H. Daniels, G. P. A., New York.

Mr. R. H. Pooler, Serena, Ill., makes a cartridge belt that is exactly what every shot gun shooter would want if he knew about it. The belt is made of a web, and has a suspender to pass over the shoulders. The cartridge holders are all the new model patented by Mr. Pooler. The belt is fastened in front by a new style of clasp, which is easy and rapid to manipulate, and which when hooked will stay until unhooked by hand. Stringers for carrying game can be attached to the belt at will. Write Mr. Pooler for his illustrated circular and for a sample cartridge holder, which will be sent free to anyone mentioning Recreation.

Leeds & Lippincott, of Haddon Hall, one of the big hotels at Atlantic City, N. J., have issued a book that is an exquisite work of art. It contains 6 full page pictures printed in color, illustrating the hotel inside and out, the beach, the famous board walk, the golf grounds, etc., in such a way as to make anyone who examines the book long for an opportunity to see this famous resort for himself.

These people have also issued a calendar, which is one of the neatest and most beautiful of the season. Both of these will be sent free to anyone asking for them and mentioning Recreation.

The Hazard cup, emblematic of the world's wing shot championship, was won at Kansas City December 21st, by C. W. Budd, by the score of 30 straight. F. S. Parmlee was second with 34 in a field of 32 representative expert shooters. Both gentlemen use U. M. C. factory loaded shot shells. This contest was followed by a team shoot between Omaha and Kansas City, 10 men on a side, shooting at 25 birds each. Every member of the victorious Omaha team shot U. M. C. factory loaded ammunition, as did 6 of the Kansas City shooters.

The Harrington & Richardson Arms Co. have issued a calendar for 1902, which is sure to be popular. The picture represents a hunting girl armed with a Harrington & Richardson gun, and the result shows that these people knew where to go for an artist that could do this kind of work. He should have signed the picture, but unfortunately he has not done so.

This calendar will make an attractive hanger for any office or den, and will be sent free to persons asking for it and mentioning Recreation.

Sportsmen who visit New York during the winter should all go to Wallack's theatre. Col. R. E. Moss, the manager of that house, is a thorough sportsman, a big game hunter, a member of the L. A. S., and vice-warden of the New York Division. Sportsmen may therefore rest assured they will always find at this house high class entertainment, and that they will be courteously and properly taken care of.

The Franklin Institute, of Philadelphia, on behalf of the National Export Exposition, awarded to the International Correspondence Schools the highest award, a diploma and a silver medal. The specific reason for the award, as stated in the diploma, is a unique, thorough and comprehensive system of technical education by correspondence.

Editor: Who sent in this item about that last hailstorm?

Sub-Editor: Young Jenkins, of Podunk. Why?

Editor: Why, he says some of the hail stones were as large as canary birds' eggs; that chap is too honest to be a reporter; just drop him a line and offer him the position of cashier in this establishment.—Puck.

I received the canoe you sent me as a premium for 12 subscriptions. It is the third canoe I have had recently. The other 2 were canvas and far inferior to my new one in every respect. The ease with which I secured the premium makes it the cheapest canoe I have ever received or ever expect to receive. I thank you sincerely for it. Lin Smith, Indianapolis, Ind.

Anxious Father (from top of stairs)—Say, Mary Jane!

Mary Jane—Yes, papa.

"Is it eleven o'clock yet?"

"Yes, papa."

"Well, give the young man my compliments, and ask him to kindly close the front door from the outside."—Chicago Daily News.

"Hello! What's your hurry?"

"I'm going out to Subbubhurst to look at a piece of property a real estate man wants to sell me."

"Ah! Want to see how the land lies, eh?"

"Yes. Also how the land agent lies."—Exchange.

The Syracuse gun you gave me as a premium for 30 subscriptions came promptly. It is a good hard shooter, and I would not take $40 for it to-day. It took me one day to get my 30 subscribers.

E. L. Benson, Omaha, Neb.

I received the Harrington & Richardson automatic hammerless revolver and am much pleased with its shooting. It is a handsome weapon, too.

W. G. Wright,
Hawkesbury, Ont., Can.

The Thompson hunting boots arrived to-day. They are a perfect fit and are just what I wanted. Allow me to thank you for your kindness and promptness in sending them. E. S. Mack, Beaver Falls, Pa.

The Marble pocket axe which you sent me for 3 subscriptions came to hand. It is perfection.

I. J. Engelson, Watson, Minn.

Mrs. Myles—"That hat makes your face look short."

Mrs. Styles—"That's funny. It made my husband's face look long."

Received the Shattuck gun as a premium. It surpasses my expectations.

W. T. Adderley,
Spokane, Wash.

Recreation is the best book for amateur photography and outdoor sport that I have ever read. It is everything the name implies. S. L. Hunt, Stamford, Conn.

The Indian Paddler canoe arrived in good order. It is a beauty and finely finished. Please accept my sincere thanks.

Robert Shirley, Waterloo, N. Y.

Recreation brings me more enjoyment than any other periodical I read. May the good work go on.

B. Frayer, Cleveland, Ohio.

Judge—"You say the defendant turned and whistled to the dog. What followed?"

Intelligent Witness—"The dog."—Exchange.

I received the Shakespeare reel all right, and am well pleased with it.

A. F. Flick, Cleveland, O.

CAUTION See that each bottle bears our signature over the Cork
The Hayner Distilling Co.
HAYNER'S
SEVEN YEAR OLD
RYE
Double Copper Distilled
Absolutely Pure
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PREVENTS ADULTERATION

Since *1866*

Hayner's pure double copper distilled Rye Whiskey has been sold to Consumers direct from our own Distillery, known as "Hayner's Registered Distillery No. 2, Tenth District, Ohio." No other Distillers sell to consumers direct. Those who offer to sell you whiskey in this way are speculators who buy to sell again, on which plan they are compelled to add a profit, which you can save by buying from us direct.

We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for $3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive and test it, if not satisfactory return it at our expense and we will return your $3.20.

Such whiskey as we offer you for $3.20 cannot be purchased elsewhere for less than $5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of **pure** whiskey, absolutely free from adulteration.

REFERENCES.—Third National Bank, Dayton ; State National Bank, St. Louis, or any of the Express Companies.

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THE HAYNER DISTILLING CO.,

226-232 West Fifth Street, DAYTON, O. 305-307 S. Seventh St., ST. LOUIS, Mo.

N.B.—Orders from Ariz., Col., Cal., Idaho, Mont., Nev., N.Mex., Ore., Utah, Wash., Wyo., must call for 20 qts. by freight, prepaid.

I guarantee the above firm to do as it agrees.—EDITOR.

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GETS EVERY THING IN SIGHT

TO THOSE WHO HAVE NOT SEEN THE work produced by these remarkable Panoramic Cameras it is a revelation. The Revolving Lens takes everything in sight, working on the principle of a focal plane shutter.

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We are selling directly to the consumer from the factory. We have adopted the plan of selling these cameras on monthly payments. You have the camera while you are paying for it. This certainly shows our confidence both in our cameras and in human nature. Write us for full particulars.

Multiscope & Film Co., No. 136 JEFFERSON STREET
BURLINGTON, WIS.

AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

PRIZE WINNERS IN THE ANNUAL CONTEST.

Recreation's 6th annual photo competition closed November 20, 1901. Mr. H. M. Shrady, the sculptor, Mr. Louis Akin, one of Recreation's staff artists, and Mr. James Cruikshank, a well known mechanical engineer and inventor, were chosen as judges. They devoted several hours to a careful and conscientious examination of the pictures, and awarded prizes as follows:

1st—Upper Sacramento River, W. H. Bartlett.
2nd—In Full Sail, D. W. Flint.
3rd—Fly Fishing, H. G. Higbee.
4th—A Howling Coyote, E. N. Good.
5th—Besieged, J. E. Tyler.
6th—All in a Row, R. H. Beebe.
7th—Willow Ptarmigan on Nest, Evan Lewis.
8th—Resting, Mrs. P. B. Kirschner.
9th—Homers, H. H. Hess.
10th—A Hunter's Solace, C. W. Long.
11th—Wild Goose on Nest, Mrs. E. E. Lawrence.
12th—Bird and Eggs, H. P. Gosney.
13th—In the Rush of Waters, D. G. Tolles.
14th—A Natural Pose, W. H. Fisher.
15th—His Best Day, W. L. Wilcox.
16th—Meddling with Danger, H. G. Higbee.
17th—Nest of Ruffed Grouse, W. H. Fisher.
18th—A Good One, E. D. Hess.
19th—Muskrat, W. Stark.
20th—A Prairie Gopher, Clinton A. Smith.
21st—Hen Hawk, J. Bauer.
22nd—Bugling, O. H. Hill.
23rd—Wild Geese, Mrs. E. E. Lawrence.
24th—Live Wild Rabbit, Dr. J. B. Pardoe.
25th—Up a Tree, J. H. Miller.
26th—Taking a Sun Bath, F. N. Wood.
27th—Six O'clock P. M., H. E. Loftie.
28th—A Morning Nip, R. C. W. Lett.
29th—I'm Busy, J. R. Peterson.
30th—A Good Retriever, J. E. Stanley.
31st—Rosy Gulls, H. K. Job.
32nd—Dash at Close Quarters, B. L. Nichols.
33rd—A Lodge in the Wilderness, Mrs. P. B. Kirschner.
34th—Thank You, C. M. Hay.
35th—Hairy Woodpecker, C. C. Speight.
36th—Owlets, Clinton A. Smith.
37th—Thinking It Over, Dr. J. B. Pardoe.
38th—Quails in the Stubble, E. C. Thatcher.

The Special Prize offered for the best photograph of a live wild animal was awarded to Mr. H. S. Walker, Jr., for his picture of Virginia Deer.

The following were highly commended:

Moonlight on Lake Erie, E. S. Wilson.
A Resort of the Rainbow, F. M. Hodges.
Jip, J. E. Stanley.
An Unfair Deal, J. E. Tyler.
Old Diamond, a Grouse Dog, H. M. Beck.
Fishing, Dr. H. Gibbes.
Jammed Again! Chas. Drechsel.
Lone Fisherman, H. M. Beck.
Old Woodsman, H. C. Robinson.
Woodsman, H. C. Robinson.
Fox Squirrel Panel, Andrew Emerine.
In the Long Grass, E. C. Congdon.
Logging, D. G. Tolles.
The Swan, T. H. Wade.
We Shall Have Fish for Dinner, A. Emerine.
Curiosity, E. E. C. Gibbs.
Live Rabbit, W. R. Smith.
Pigeons, H. H. Hess.
'Possum, W. R. Smith.
Pole Cat, L. D. Lindsley.
Mending the Nets, E. S. Wilson.
A Real Fish Story, A. Emerine.
Willie Bodkin's Trout, A. Emerine.
They Wouldn't Bag Alive, J. E. Tyler.
Farewell to Summer, H. P. Morton.
A Bunch of Cottontails, G. W. Batten.
An Intruder Discovered, J. E. Tyler.
An Irish Stew, A. Emerine.
Called, T. L. Edden.
Young Golden-winged Woodpeckers, J. H. Miller.
Sand Swallows, C. C. Speight.
Chipmunk To-morrow, H. G. Higbee.
The Real Thing, E. L. Cobb.
Sailing Home, T. J. Curren.
Sailing, L. F. Newcomb.
A Favorite Resting Spot, Donn Day.
Hard Work, A. B. Richmond.
Chicken Thief, H. C. Robinson.
A Bad Point of View, Dr. J. B. Pardoe.
Nesting, C. C. Speight.
Snake, J. H. Miller.
I'll Throw That One Back, Dr. J. B. Pardoe.
A Feathered Pair, I. N. Cross.
Bird's Nest, Evan Lewis.
A Frog He Would a Wooing Go. C. L. Garrett.
Live Frog, C. E. Clark.
Bluebird at Nest Hole, C. A. Reed.
Well, Well, I Like This! L. D. Lindsley.
Lizard, J. W. Jones, Jr.
Bob Cat, W. M. Horsley.
Green Heron, H. K. Job.
The Champion, Miss Ollie Wallace.
Out from the House, L. D. Lindsley.
Rabbit, W. R. Smith.
Three of a Kind, H. T. Whitmore.
A Full House, H. T. Whitmore.
Listening, Homer Smith.
Young Kingbirds, G. E. Embody.
Muskrat, W. Stark.
Wild Duck, C. A. Smith.
Homeward, E. A. Reed.
Young Owl, H. K. Job.
In Full Sail, L. F. Newcomb.
Buzzards, F. C. Steele.
Cedar Birds, E. T. Wood.
Ring-billed Gulls, H. K. Job.
Waiting for a Bite, H. B. Wentworth.
Nest Under the Apple Leaves, Homer Smith.
Cedar Bird, Dr. J. B. Pardoe.
Trout Fishing, H. Marsch.
Nest, Evan Lewis.
Jaws of the Spider, W. Stark.
Feeding, Mrs. B. H. Morgan.
Baby Owl, Clinton A. Smith.
Owlets, Clinton A. Smith.
After the Hunt, M. Maurin.
Nest, G. E. Embody.
Magpie, T. H. Wade.
Deer Mouse, C. C. Speight.
Thrush, C. C. Speight.
Mink, W. Stark.
Gopher, H. K. Job.
His Black Majesty, W. H. Fisher.
Two of a Kind, C. C. Speight.
Spider Web, Mrs. F. W. Tilden.
Garter Snake, W. Stark.
Chipping Sparrow Feeding Young, Dr. J. B. Pardoe.
Bluebird, R. H. Beebe.
Plenty for One, Mrs. W. Dunlap.
Over the Fence, G. E. Embody.
An Earnest Point, W. H. Gorham.
Jack and Bill, Dr. J. B. Pardoe.
Wild Geese and Young, Mrs. E. E. Lawrence.
Feeding Wild Geese, Mrs. E. E. Lawrence.
Standing a Bevy, F. A. Bovee.
Setter, H. C. Tobey.

Deer Park, E. J. Stow.
A Disputed Point, H. D. Schermerhorn.
The Start, G. H. Meek.
Wonderland, an Appreciation, F. Bryne Ivy.
Tillie, with a Gun, Dr. J. B. Pardoe.
Tillie Catching Minnows, Dr. J. B. Pardoe.
Sea Girt, N. J., F. L. Wilcox.

I have decided to give each person whose work was commended a year's subscription to RECREATION. I trust this may prove satisfactory to many who would otherwise have felt disappointed at not winning a prize and that all who competed in this contest may try again next year.

ENLARGING BY DAYLIGHT.

Notwithstanding the variability in the intensity of daylight, it has one great advantage over all artificial lighting; at any rate during the summer months, when the intensity is fairly constant a few hours in the middle of the day. With artificial illumination, one must always employ either condensors or elaborate methods of equalizing the light over the negatives from which the enlargement is to be made, by means of diffusers or translucent screens, which cut down the power of the illuminant to an enormous extent. As against these, daylight means speedy and inexpensive work, as well as a quality of enlargement such as no form of artificial light can yield unless it be the arc light and diffusers, says Photography, of London.

Focusing, when working with daylight, has, of course, to be done with as much care as when using artificial light.

With lenses of the most modern types, it will be found in many cases that the focus alters appreciably with an alteration in the stop. Focusing then becomes a more difficult operation than it otherwise would be, and must invariably be carried out with the stop which it is proposed to employ.

The most convenient arrangement for daylight work when the enlargements are not to be of excessive size will be found that which takes the form of a long box, having the lens fitted in the center of a septum capable of being slid toward either end of the box. The negative holder may be permanently fixed, the lens and the other end of the apparatus being adjustable, but to work under the most convenient conditions it will be found better to make the negative holder capable of adjustment also. In fact, focusing can be more easily done from that end than from the other. If it is proposed to make the apparatus virtually a fixed focus camera for enlarging, a convenient type for the amateur, then the respective distances of the 2 ends from the lenses should first be found by calculation. When once the negative holder and the screen are placed therein, fine focusing may be effected by means of a magnifier until the greatest degree of definition is attained.

To do this final focusing once for all and with the greatest accuracy, a piece of plain glass may be substituted for the negative, and in place of the sensitive paper a sheet of printed matter. By focusing this printed matter on the glass and using an eyepiece, extremely sharp definition may be obtained. It is more difficult to focus an enlarged image of the negative sharply on the screen than it is to focus a reduced image on a piece of plain glass placed where the negative is to be.

If the focusing is to be done on the enlarging board on a sheet of white paper or card, an eyepiece is not required, and, indeed, can not be used. I watched a photographer focusing a negative for enlarging a few weeks ago, and noted an elementary point which he overlooked at a cost of some 10 minutes of his time. Do what he could, the enlargement would not come sharp. An examination of the negative showed it was itself slightly blurred; not noticeably so in the ordinary way, but plainly enough when magnified on the screen.

One other point is often disregarded. When enlarging straight into a darkened room by daylight, there should be nothing of a light color near the sensitive paper or between it and the lens. If there is, the light reflected from the surface of the bromide paper will be reflected back on to it, and the whites are sure to be to some extent degraded.—Camera and Dark Room.

HOW SOME PRIZE WINNERS ARE MADE.

Malden, Mass.

Editor RECREATION:

I send you 2 prints of a photograph entitled "Three Virginia Deer." It was taken with an Eastman Kodak on a New York plate. The lens was one that was furnished by the Eastman Company. The photo was a snap shot; but I do not remember the length of the exposure. These prints are made on platinum paper.

This photograph was taken on Ellis pond, Somerset county, Maine, in September, 1899. My brother and I, with a guide, stayed there 3 months during the summer. Deer and moose were numerous and we tried many times during our stay to get some pictures of them, but this one is the only satisfactory plate we secured, on account of poor light or because the deer were frightened before we could get near enough to take a photograph.

The morning we took this photograph we had an early breakfast, as our guide was obliged to go to the settlement, 11 miles away. After he had started we were sitting on the piazza of our camp, when I thought I saw something across the lake, about a mile distant. When I examined it with a glass it proved to be a group of deer. I then proposed that we try to get a photograph of them. After hurried preparations we got into our canoe, my brother in the bow with the camera and I in the stern. The light was poor and the cove in which the deer were was in the shade; but as there was no perceptible wind I could paddle quietly. While I paddled across the lake we were compelled to keep in sight of the deer. When we were about 100 yards away the fawn on the left saw us, but for some reason the old doe did not see us. I kept paddling until we were near the deer, when the canoe hit a sunken rock. As we could not get the canoe off the rock, we took the picture. Just then the old deer scented us, and leaping out of the water disappeared in the woods. The 2 fawns ran to shore and one followed its mother. The other stood in the road, which is in the center of the photograph, and watched us for a quarter of a minute.

Henry S. Walker, Jr.

(See page 97.)

The photo of a coyote howling is a snap shot, printed on platinum paper. It represents my first attempt to develop a plate and print a picture. I don't know what kind of a lens is in my camera, but the camera only cost about $8, lens and all. The coyote was alive, though a pet one that I raised here at my ranch. I found the den, or nest, early last spring. In it were 4 young coyotes with their eyes just open. I killed 3 and took one home with me. I raised it on sweet milk and meat until 3 months old, since which he has lived with the dogs on scraps thrown from the kitchen. I was 10 or 15 feet away from him at the time I took the photo, and he howling his best.

E. N. Good, Chillicothe, Tex.

(See page 105.)

The picture entitled "Resting" was taken with a Bausch & Lomb lens. The buck weighed nearly 200 pounds and was badly wounded, one of its hind legs being shattered, or I should not have been so fortunate as to obtain this photo. The exposure was ½ second, U. S. 32, about 10.30 in the morning of a bright day, at Big Otter lake, in the Adirondacks. The print is on Velox paper. I use Carbutt's hydrochinone developer, which I mix myself.

Mrs. P. B. Kirschner,
Lowell, Mass.

(See page 105.)

SEARCHING FOR PICTURES.

C. A. Kolb, in the Camera and Dark Room.

Many amateurs have a lot of prints which excite little interest because they were taken in a haphazard way, without the least thought on the part of the operator as to the result; but just to see how they would look on paper.

What we must do is look for our pictures. If you find a bit of scenery you think would make a pretty picture, do not hurry to photograph it, but stop and consider. Would it not be improved by taking it from a different point of view, or perhaps by the introduction of a figure or 2, or later in the day when the sun is at a different angle?

Nothing is to be gained by haste, when with a little more time and thought you can improve your picture tenfold. A clump of trees, a country lane, a brook, cattle grazing, all make pretty pictures, but are greatly improved by the introduction of figures.

Never cut your picture exactly in half by the horizon line nor have the foreground take up so much of the picture that the remainder is perched in the upper corner. Study your subject; look at your ground glass and note the different points, and do not give an instantaneous exposure when there is no excuse for your not making it a time exposure.

Stop your lens well down, but of course do not use too small a stop. If your result is unsatisfactory, see what the trouble is and try again.

In portraiture, never use the plain side of a house for a background; shrubbery or grapevine is better. Never allow your subjects to stare into space, but have them rest their eyes on some object. This will do away with that unpleasant vacant look. Your subjects will invariably look at your camera, unless told otherwise, and if they do not lower their heads they will at least their eyes, which has an unsatisfactory effect.

Photographing babies is considered the most difficult branch of photography, but will be found easy if a few suggestions are heeded. The best way is to have someone at your back or right hand to amuse the child with a toy or the like. Then when you get the desired expression, make the exposure, which, for the reason that the little imps are seldom still, should be as short as possible. Therefore, use a large stop.

Never place your subjects in strong sunlight, but do not on the contrary tuck them away in a dark corner. Place them near the edge of a shadow where the light is strong. When placing subjects beneath trees, be careful of shadows. Look for pictures everywhere, in the woods, on the water, at home; everywhere you will find story-telling pictures which will amply repay you for your trouble.

CRUELTY CONDEMNED

Before the close of your photo competition, I wish to make a few suggestions to you, with which I think you, as a bird protector, will agree. During the past year a book on "The Home Life of Wild Birds" has been published. The illustrations are all made from life, by what the author terms a "new method." He cuts down the branch containing the nest and removes it to an open space in the full glare of the sun. He seats himself, with his camera, in a tent beside the nest and awaits the return of the parent bird. The author states that in several instances the entire nest full of young birds died from the effect of the heat. This method has not a single advantage to commend it, is cruel and is positively illegal. If it is allowable to remove a nest and carry it 50 or 100 feet away, it is equally allowable to carry it a few feet farther and take it home, which of course is against the law. This year there are many imitators of this method, and doubtless you will receive a number of photos taken in this way. Your action in regard to these will have much to do with the future of our birds. This method is a great retrograde movement in the present wave of protection, and must be stamped out. I have refused a number of photos taken in this way, and shall do all I can to stop the further practice of it. You are in a position to accomplish much in this matter, and I have noticed you do not shirk when the protection of birds is at stake.

C. A. Reed,
Editor American Ornithology,
Worcester, Mass.

ANSWER.

I am grateful to Mr. Reed for his timely caution. A number of bird pictures have been entered in my competition, but none that I can identify has been made by the method Mr. Reed outlines. Had any pictures turned up that had been obtained by this cruel process, they would have been promptly thrown out and returned to the maker.—Editor.

BACKED PLATES AND RAYFILTERS.

Please give me a simple formula for a quick drying and easily removed preparation for backing plates. Which will produce the best results as to color values, ordinary plates used with a rayfilter, or orthochromatic plates without the screen?

A. R. Sedgley, Wakefield, Mass.

ANSWER.

There is no published formula for backing which is not slow in drying and very sticky. You can get a cake of what you want from Edward W. Newcomb, Bible House, New York, for 50 cents. It will last you a year unless you are an enormous user of plates, and it dries quickly and removes with a rub of a damp cloth. His formula is not published.

After a long series of tests no definite answer can be given as to which will produce the best color values, ordinary plates used with a rayfilter or orthochromatic plates. The results depend on the light and the kind of plate used, the density of the screen, and, more than all, on the subject. Where exact rendering of color values is sought, and the subject contains a preponderance of colors below the screen, orthochromatic plates without the rayfilter would undoubtedly be better than ordinary plates with the rayfilter. If the reverse is true, the ordinary plates with a moderately light rayfilter would give the best results. Where speed is required, a fast orthochromatic plate without the rayfilter will give greater speed than ordinary plates with the rayfilter.

I do not, however, see the necessity of considering such an inquiry as this, for if it be possible to use orthochromatic plates the addition of the rayfilter gives a perfect combination, and where it is impossible to use them a rayfilter gives better results with ordinary plates than no rayfilter.—Editor.

HELPFUL SUGGESTIONS.

Blisters, which are so commonly encountered in making bromide or other prints, may be prevented by passing the print out of the fixing bath into a strong solution of common salt, and gradually diluting this until the print is washed. Blisters may also be prevented by using a weak fixing bath and leaving the print in for a longer time. It is the rapid dissolution of the chemicals in the film that causes blistering, and either of the above will afford a more gradual change.

Sometimes the insides of box cameras are not properly blackened, and if the black on the inside is glossy or worn off in parts, reflections are apt to produce fog on the plates. A good dead black varnish for woodwork may be easily made by mixing gold size with lamp black, or vegetable black, and diluting with turpentine to the consistency required. The less size used the more dead will be the surface, so use no more size than is sufficient to bind the mixture.

Negatives that are thin and flat, whether from under exposure or under development, if they are full of detail may be made to yield beautiful prints, by printing through one or more thicknesses of tissue paper, or by covering the glass side of the negative with any ground glass substitute.

A good effect is sometimes produced by

printing a small negative on a larger sheet of paper, and afterward tinting the surrounding paper to any depth desired by shading the printed part, and exposing the edges. Instead of trimming down prints that show a waste of uninteresting detail around a small picture in the center, it may be better to cut a mask to cover the part of the print desired and then print the margin to a suitable tint, possibly leaving a small strip of white between.—Exchange.

SOME CONVENTIONAL FALLACIES.

I used to think that films were both harder to develop and less handy to print from than glass plates. Further experience with films reverses this opinion. I also thought it necessary always to use orthochromatic plates and a color screen to get good color values and cloud effects in landscape work, until I discovered that transparent film had orthochromatic qualities that can not be surpassed. In addition to the acknowledged advantages of lightness and portability, the film support is superior to glass in being free from bubbles, and in the fact that it is not liable to crack or break. If the makers of transparent film would meet dry plate prices the dry plate would have to go.

I used to think it more economical, and handier as well, to develop Velox and other similar papers with a brush instead of by immersion, but I find I was mistaken, the latter way being generally more satisfactory.

When I first took up photography, I naturally fell into the error of concluding that a short exposure or an undertimed negative required stronger developer than one normally timed or over exposed. Of course the reverse is true. For an undertimed exposure or a snap shot, normal developer should be diluted with one to 3 times its quantity of water, and development allowed to proceed slowly.

I used to suppose that an ounce meant an ounce, and a dram meant a dram, always. Sometimes they do, but with experience I learn that the strength of chemicals varies, and that the only safe and reliable scale of weights and measures in the photographer's dark room is the hydrometer.—The Photo-American.

DEVELOPING.

There are a number of suggestions as to developing which should be thoroughly studied and carefully followed, to insure good results. Prints may be developed by immersion, or the developer may be applied with a tuft of cotton or a brush. If working by the former method, the developer should be put into a tray somewhat larger than the size of the paper you are using. To the right of this place a bath of water in any convenient receptacle, and next to that the tray for the fixing bath. The prints should be immersed edgewise, face up, in the developer, and they should be evenly covered therewith at once to insure uniformity of development.

To develop by the cotton or brush method provide yourself with a pane of glass a little larger than the print to be developed and pour the developer into a cup or tumbler. After the paper has been exposed, place it face up on the glass, thoroughly saturate the cotton or brush and pass it quickly over the surface of the print, applying the developer evenly and abundantly. The image will appear gradually, if the exposure is right. If your print flashes up quickly and at once grows black it is a sign you have over-exposed in printing or that you need more bromide in your developer. If under-exposed, your print will, on the contrary, develop slowly and it will finally be found weak in important parts.—Velox Manual.

AMATEUR PORTRAITS.

To attempt portraits of his friends is one of the most insidious temptations of the amateur photographer. To all who contemplate such a use of their cameras Punch's famous advice "don't" applies. The reasons are legion. To tackle such a task is to subject the strongest friendship to the severest possible strain, and, even when a large measure of success attends the effort, it must not be expected that the model will be satisfied. The model of the amateur is a much more exacting critic than the model of the professional. Because he is a friend he thinks he can take greater liberties and say nastier things. An amateur I know did his best a little time ago to take a portrait of a friend, and he really secured an excellent likeness. What was the result His friend almost tore his hair with rage because he had been made to look "so old." The model in question confessed to 60 years, and the photograph certainly did not make him look any older. No, the professional photographer, with his retouching, has so impressed people with the idea that it is the business of the camera to make models look 10 or 20 years younger than they are, that the amateur, as he values his own peace of mind, will cry off all invitations or temptations to take his friends.—The Traveler.

A SINGLE SOLUTION DEVELOPER.

Over a year ago I read in RECREATION a formula for a one solution developer. I made up a quantity and found it superior to anything I had before used. Now I have lost the formula. Will you kindly give me one that will yield great contrast?

P. S. Jones,
Port Washington, S. C.

ANSWER.

No. 1.

Water	16 ounces.
Oxalic acid	¼ “
Pyrogallic acid	1 “
Metol (Hauff)	¼ “
Bromide potassium	16 grains.

No. 2.

Water	64 ounces.
Sulphite sodium (crystals)	8 “
Carbonate sodium	4 “

To develop take

No. 1	1 ounce.
No. 2	5 ounces.
Water	2 to 4 ounces.

In summer, or when soft, delicate negatives are desired, use the larger quantity of water.

The above is a capital developer in 2 solutions. Use a tray containing water, 10 ounces; bromide of potassium, 1 ounce, and dip your plate in that 2 minutes at a time as needed during development. You will in that way get more contrast than you ever saw before.—EDITOR.

PRINTING ON SILK.

The silk must be well washed to free it from dressing, then ironed flat, and then immersed 5 minutes in

Arrowroot	4	grains
Ammonium chloride	4	grains
Boiling water	1½	ounces

Hang up to dry, iron again, and brush over with a solution of

Silver nitrate	20	grains
Water	1	ounce

Dry, then print on in the usual way. Wash and tone in any ordinary borax or acetate bath of half the usual strength, and fix in a hypo bath of the usual strength.

Or an easier method is, after washing the silk, to paint it with

Uranium nitrate	150	grains
Silver nitrate	15	grains
Distilled water	¼	ounce
Methylated alcohol	¾	ounce

Dry in the dark, print deeply, wash in weak nitric acid and then in water and iron. This gives a dark brown image, which can be toned in a weak gold bath.—Photo Times.

THE USE OF BROMIDE OF POTASSIUM.

All developers require the addition of a certain quantity of bromide of potassium to keep the whites cleared, and it is most conveniently used in 10 per cent. solution, which is made by dissolving one ounce of bromide in 9 ounces of water. As the quantity of bromide necessary varies with the age and dryness of the paper and the purity of the water and chemicals used, it can only be given approximately. It is easily determined, however, by first adding the quantity given in the above formula to the solution and then making a trial test by laying a half-inch strip of Velox over an important portion of the negative and developing and printing it in the regular way. If the whites appear fogged, add a few more drops of the bromide solution. If, on the contrary, the whites are clear and the blacks have a greenish tinge, there is too much bromide in the developer and it will then be necessary to add a little of a stock solution of developer that contains no bromide. To avoid this latter necessity, in adding to the quantity of bromide do so slowly, drop by drop, making tests as directed.—Photo Record.

SNAP SHOTS.

Metol-quinol developer will keep a long time after dissolving, if put in bottles which it fills to the neck, the bottles being then tightly corked and placed on their sides, so the bubbles formed by the confined air can not rise against the cork. This prevents oxidation of the developer while in the bottles. If the operator wishes to make a few prints at a time and to use the least possible quantity of developer, it is a good plan to have bottles of different sizes at hand. Select each time 1 of such a size as to be entirely filled with the developer that is left, in order to insure a satisfactory condition of the developer when it is used again.—Photo Record.

The Eastman Kodak Company announce another photo competition, in which prizes to the value of $4,000 are offered. One-half of this amount is to be paid in cash, and the other half in Kodaks. Pictures, in order to be eligible in this competition, must, of course, be made with Kodaks or with Brownie cameras. Write the Eastman Kodak Company, Rochester, N. Y., for circular giving full particulars, and say you saw the announcement in RECREATION.

Note that when just enough bromide has been added to keep the whites clear, the blacks may have a bluish tinge. If then more bromide is added, little by little, and a test print made after each addition, the tone of the blacks will be seen to change gradually from bluish-black to pure black, and if still more bromide is added, to greenish or brownish blacks.—Photo Record.

To an amatuer photographer the articles published on the beaver pictures are worth a year's subscription to RECREATION.

A. Dawdy, Tacoma, Wash.

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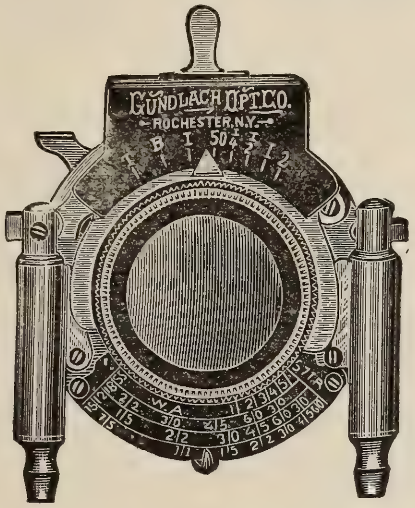

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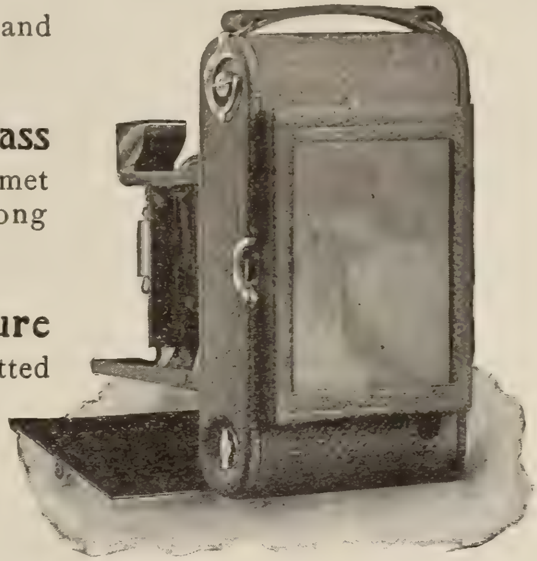

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SCRAP-BOOK NOTES.

Every one of the following ideas I have found good, and therefore suggest that other amateurs test them faithfully:

The best way to wash prints is to pin them on a board, slant it under the faucet of the bath tub, and let the water run over the prints for an hour or 2. Have the board wide enough for 2 rows of prints, and as long as you wish. Nail a narrow, thin strip of wood to each side of the board to keep the water flowing down the board instead of over the sides. To dry the prints and flatten them at the same time, make a book of blotters that are a half inch wider and an inch longer than the print, put between each 2 blotters, a sheet of glazed paper, same size as blotter, such as comes around printing paper, fasten together with 2 brass fasteners, place the wet prints on each blotter, with the glazed paper over the face of the print, put under a pile of books and press flat.

Possibly there are some amateurs who desire to take flower pictures or portraits before they can afford to buy a background; in which case they may find the following suggestions helpful. For some portraits and flowers, a sheet, draped carefully and gracefully in folds, makes a pretty background, as it prints out white and pale gray blended. A little study may be necessary to obtain a pretty result in draping, but it can be done. Other portraits need a dark background, so use a dark red or brown cloth, and drape into light and dark folds. Flowers, if an ortho plate and a ray screen are used, sometimes need a yellow or orange background, also treated as above. These backgrounds should be placed far enough back from the object photographed to be just out of focus.

Every amateur should carry a pocket note book in which to jot down bits of information, such as the price of supplies, the name of some new article to work with, the title of new books and magazines on photography, addresses of people connected with this same work, and, above and beyond all else, the location of some lovely picture such as one often sees when the camera is at home.—M. F. Oliver, in the Camera and Dark Room.

Shellac and borax make a good waterproof paper in aqueous solution. Such paper is useful as a flexible support for carbon work and in many other ways. Following is the formula:

Shellac	3 parts
Borax	1 part
Water	30 parts

Boil until dissolved. If this paper is used for carbons it must, of course, be waxed before each use.

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S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—EDITOR.

IMPROVING LANTERN SLIDES.

It is not always advisable to clear a lantern slide. Many otherwise excellent slides are ruined by being brightened up unnecessarily with ferri-cyanide and hypo. The old idea that a lantern slide must contain a quantity of clear glass was right enough, provided it was not carried too far. In most cases it is well to have the highest lights almost if not quite clear glass; but if they occupy more than a minute fraction of the plate there is a loss of gradation between them and the next highest, which will help make the slide hard and glaring. When slides are made in large numbers to sell, the taste of their purchasers has to be considered; and the non-photographic audience likes a chalky, black and white slide. Many of the most popular commercial slides are hard, and have a curious warm black color, obtained, I believe, by some process of gold toning. To photographers, however, such slides do not appeal, and when it is a question of making the best possible transparency from a negative, methods calculated to please the public must be ignored, and only those dictated by an educated taste adopted. In such a case, therefore, it is well not to have recourse to ferri-cyanide and hypo for clearing, unless absolutely necessary. There are times when so good an effect can not be obtained without its use; but, generally, it will be found that with care an equally bright result can be got by development direct, and that the gradation will be superior to any obtained by a reducer. Many slides otherwise hard are softened in effect and improved by a little intentional veiling if not carried too far. To see this, bind up such a slide temporarily with a lantern plate that has been slightly fogged and developed. The effect can often be improved by reducing this fogged slide in parts, so that it only damps down some and not all of the high lights. Those who have never tried it will be surprised at the extent to which some slides can be improved by this simple process.—Photography.

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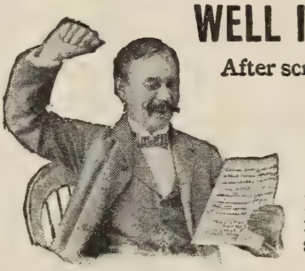

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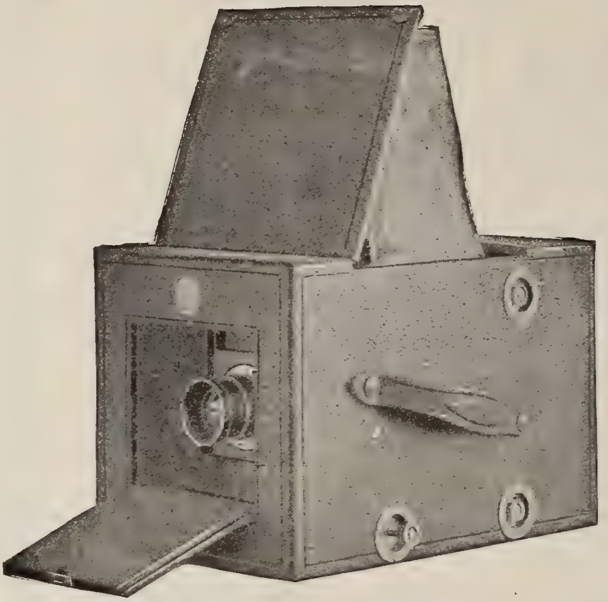

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UTILIZING OLD NEGATIVES.

Old and otherwise useless negatives are always at the amateur's disposal, and a way to utilize them should be taken advantage of. This applies to over exposed, over or under developed and spoiled negatives, or to plates not exposed but otherwise worthless.

Prepare a reducing bath of ferricyanide of potassium and hypo in water in any suitable quantity of each so long as it works fast enough. The following works well:

Hypo	1 ounce
Water	8 ounces

to which add ½ ounce of ferricyanide, preferably previously dissolved.

The negatives used should be dusted and softened in water for a short time before immersing them in the reducing solution. Then they should be put in the solution face up and rocked a few minutes until the solution is evenly distributed over the face of the plate, with no air bubbles. Leave them in the solution until all the blackness is gone and the plates seem clear. If this does not occur in 10 minutes the solution should be strengthened by adding some ferricyanide.

After being thoroughly washed, a plate may be placed face up in any suitable sensitizing solution for a few moments, the one I first experimented with being a blue print sensitizer, although sensitol or any other sensitizing solution will give good results.

If a blue print sensitizer is used the plate should dry in the dark and be put in the printing frame the same as blue print paper, printed about 30 minutes in the sun and then well washed. The print may be examined by looking through the glass from the back. If over printed it may be reduced and greatly improved in color by flooding with a solution of bichromate of potash after it has been washed for some time. When the bichromate has been washed off and the plate dried, the result will amply repay the trouble. In this way good lantern slides and transparencies may be had at a nominal expenditure of time and money.—B. C. Koloff, in the Camera and Dark Room.

ASCERTAINING CONTENTS OF UNLABELED BOTTLES.

A correspondent wishes to find out whether the contents of an unlabeled bottle be sulphate of soda, carbonate of soda, or carbonate of potash. If he will add a little hydrochloric acid to a solution of the salt it will effervesce a trifle, and, if sulphite of soda, give off a suffocating odor, or rather, sulphuric acid gas. A little of the salt left exposed to the air for a few hours will soon determine which of the other 2 chemicals it is, should it not be sulphite. If it is carbonate of soda the crystals will get more or less white and dry. If carbonate of potash, they will become more or less damp and liquid, according to the moisture in the air.—Camera Craft.

THINGS TO KNOW.

A test for hypo should be kept ready for use in the dark room as a check against insufficient washing after fixation. As the following keeps well in solution, it is perhaps the most convenient to use: Potassium permanganate, 2 grains, potassium carbonate 20 grains, water 40 ounces. Add a few drops of this solution to 20 ounces of the last washing water, in which the plates or prints have been allowed to soak for some minutes. If any hypo is present the rose colored tint will change to a dirty greenish yellow and more washing is necessary.

Paper sensitized with ferric oxalate, exposed under a negative, washed in water, and placed in a 2 to 3 per cent. solution of potassium permanganate, develops an image in brown manganese peroxide. After further washing, immersion for 15 to 30 minutes in a one to 2 per cent. bath of pyrogallic acid turns the picture dark brown. A final washing completes the process.

Metol gives soft negatives, full of detail; while hydroquinone gives contrast, tending to harshness. With pyro, however, it is possible to obtain almost any type of negative we may require, simply by varying the quantity of the various constituents. In fact, its elasticity is one of the greatest advantages it possesses.

A thin negative can be made to give a much stronger print if a piece of yellow tissue paper is gummed over the face of the printing frame.—The Photo-American.

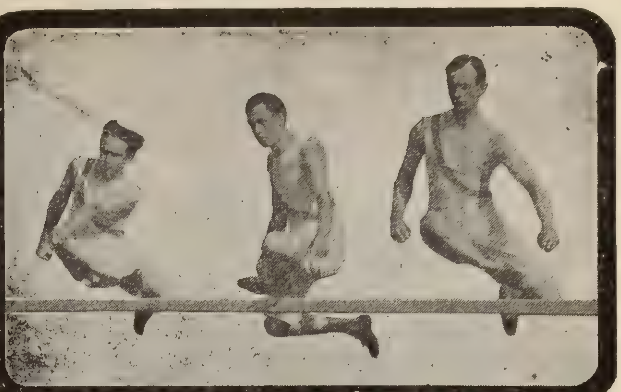
When developing film allow a little extra time for density. Film is nice stuff to work. The results are O. K.

Wax dissolved in turpentine will protect the hands and nails from stain. Try it if you object to the looks of a pair of hands that are in pyro several hours a day.—The Professional and Amateur Photographer.

CELLULOID POSITIVES.

I cannot understand why positive films on celluloid are not more generally made. The film is simplicity in itself to work, being even more simple than Velox prints, because there is no mounting required. The shadows are deep and full of detail; the high lights are of that pearly whiteness so desirable in landscape and figure work. A neat gold and white frame makes a most charming combination with the deep shadows of these positives. If your negatives are all marked, as mine are, with exposure time for Velox paper, you have only to find the correct exposure time for one and then give any other negative a proportional exposure by the same light.

Strips of Velox, being cheaper, can be used to test the exposure for any new negative. I expose my positive films by placing them in the printing frame behind the negative, setting it up facing the door at the rear of my dark room, and then open the door for 3 to 15 seconds.—Camera Craft.



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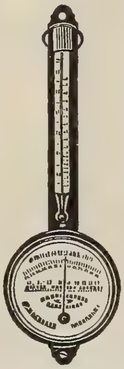

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Mrs. Newcomb: And did he mention any names?

Mr. Newcomb: No.

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Second Editor: I'm afraid it is impossible. We are already printing all the scandals and lies the paper will hold.—Exchange.

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Waiter: Sorry, sir, but you know how slow turtles are, sir.—Pittsburg Bulletin.

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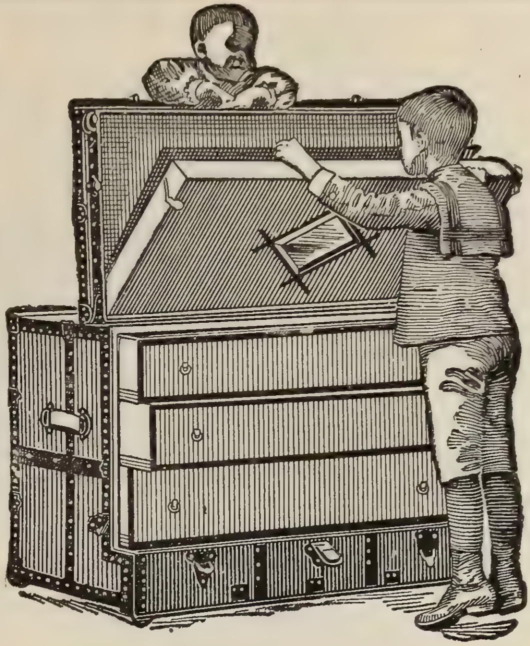

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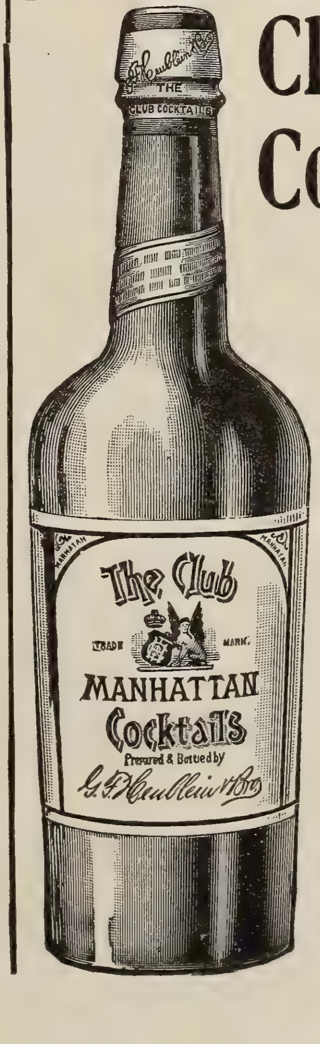

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Fred McDonald, Grayling, Mich.

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Chas. H. Todd,
S. Hadley Falls, Mass.

This is to notify you that the Marble waterproof match-box you sent me, has been received. It is satisfactory in every respect and I thank you for it.

T. L. Bollman, Castalia, Ia.

The handsome rifle I received for the club of subscribers to RECREATION has afforded me much pleasure. It is still in fine condition and perfectly accurate.

H. L. Krauth, Hamilton, O.

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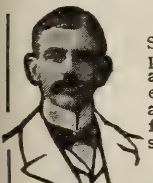

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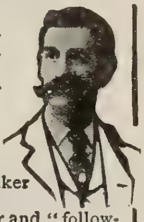

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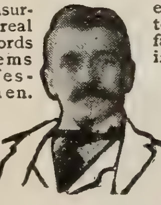

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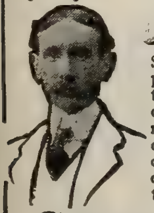

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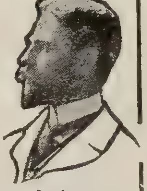

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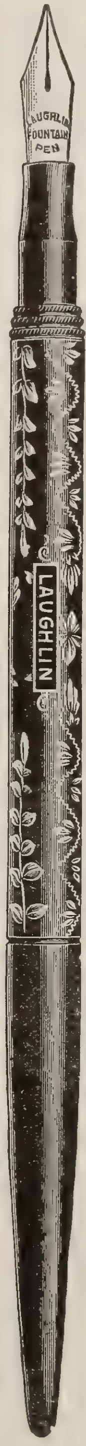

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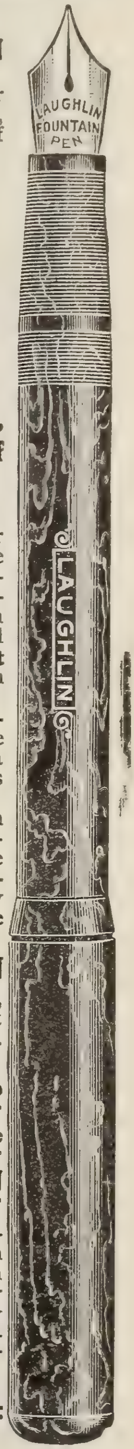

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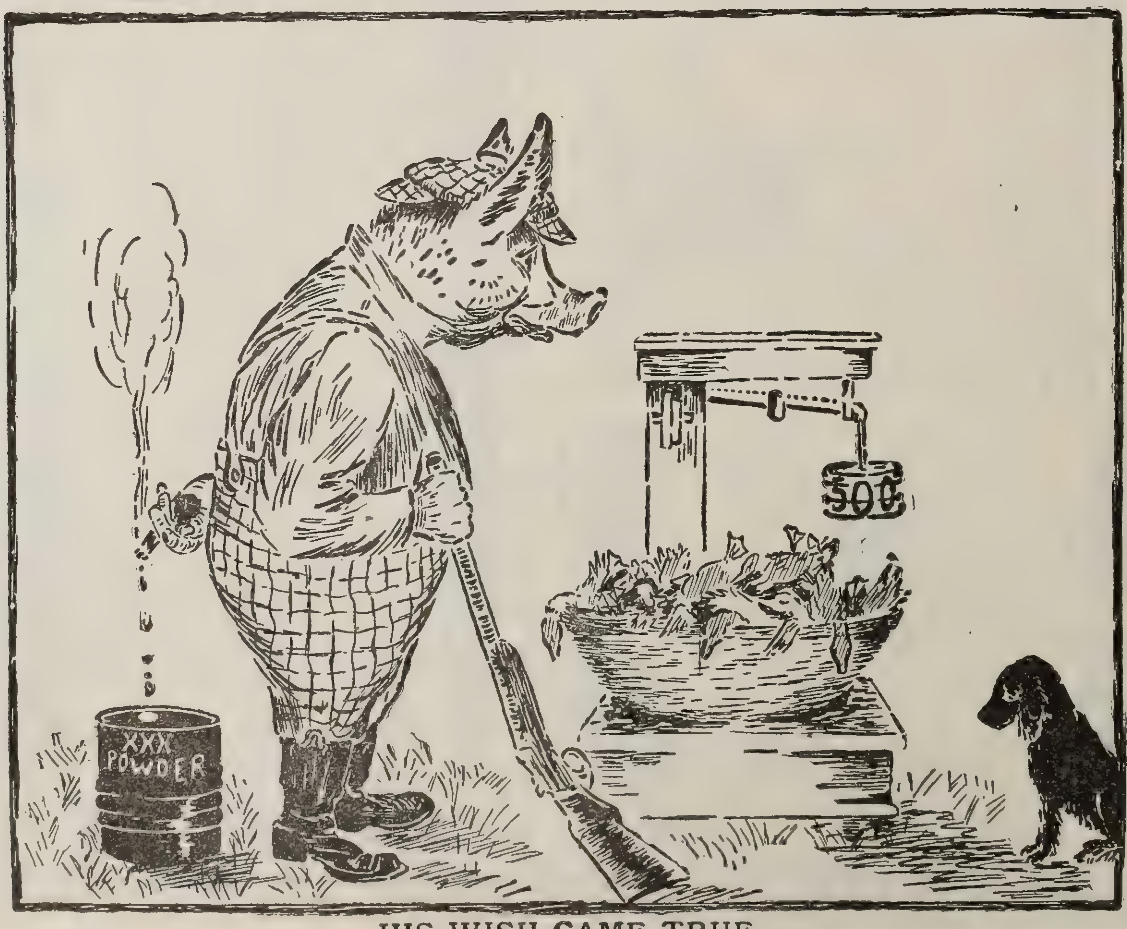

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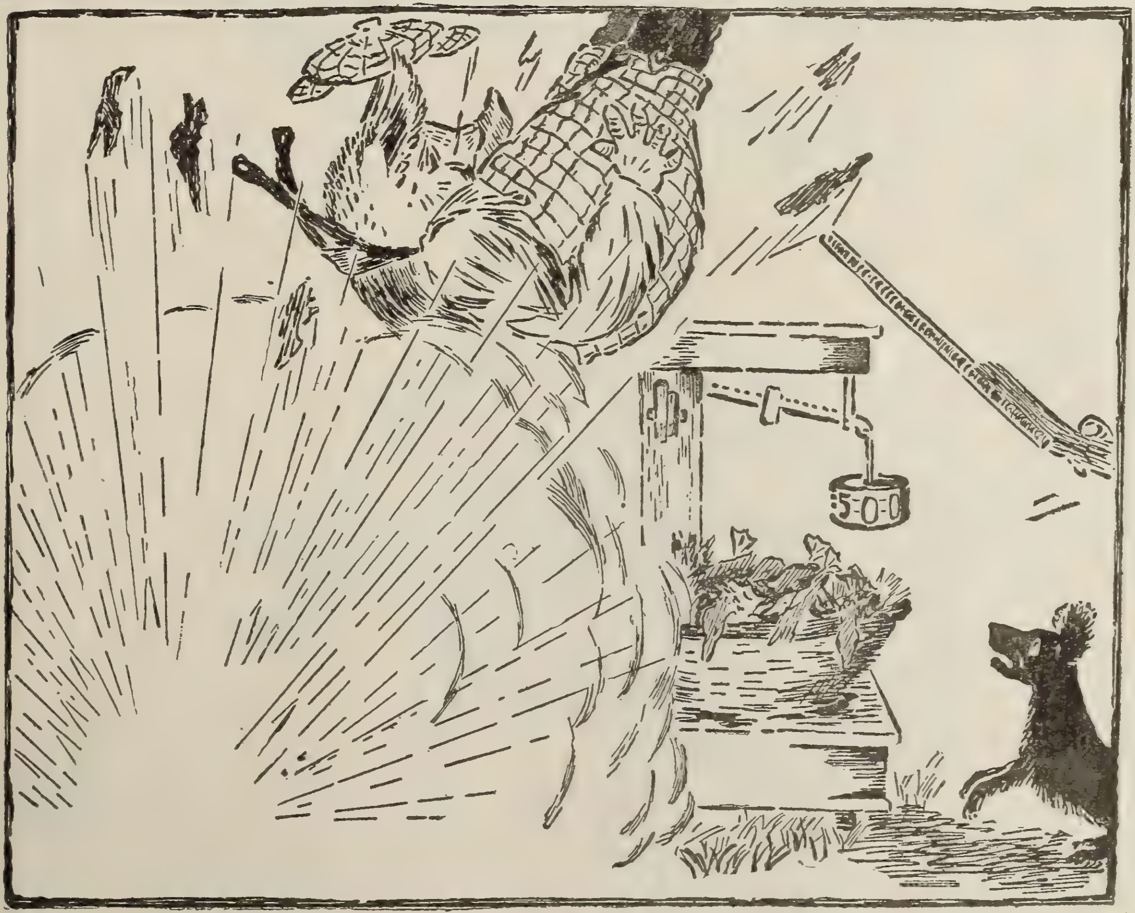

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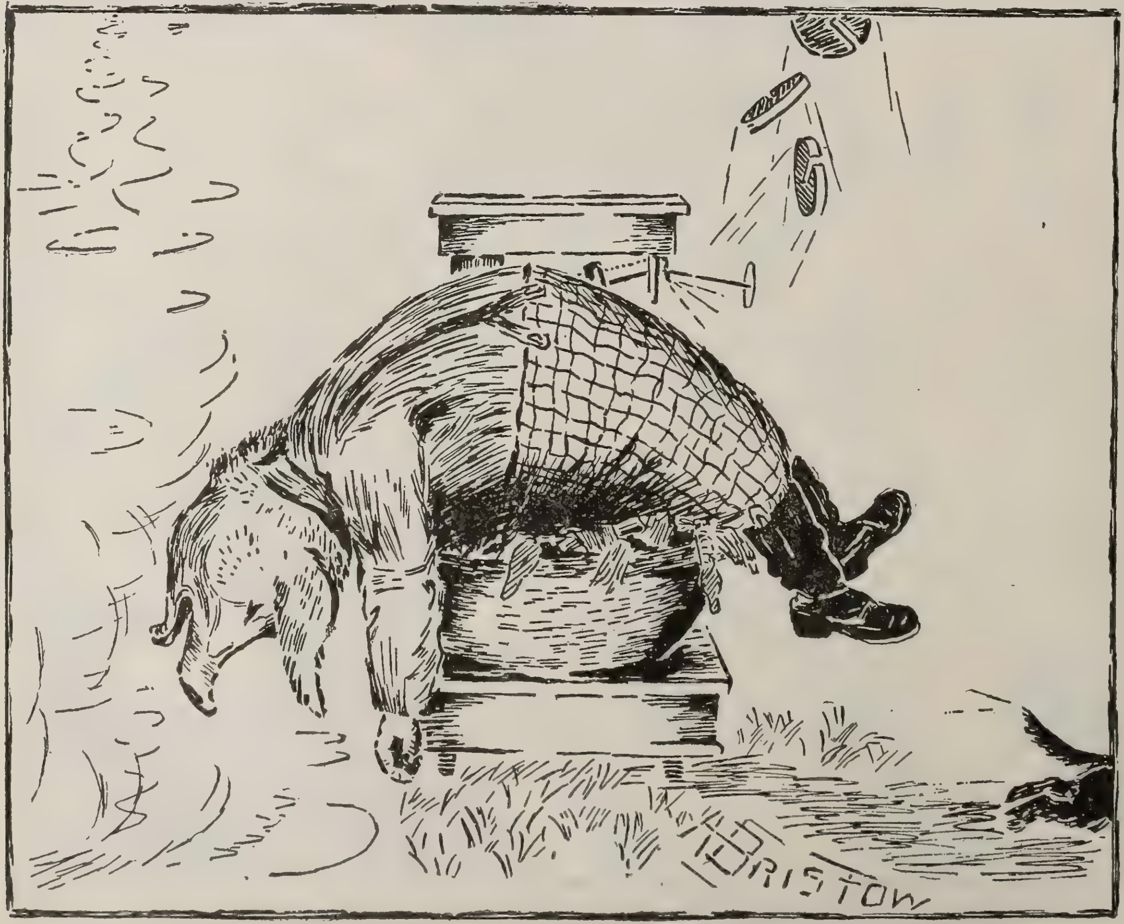

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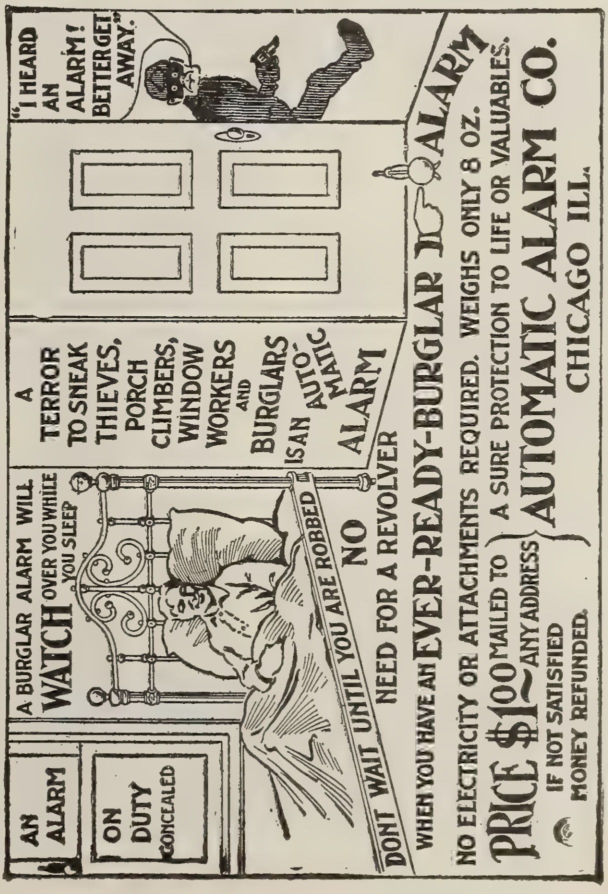

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TWO yearly subscriptions to RECREATION at $1 each, I will send a copy of *Hunting in the Great West*, cloth; or a Zar Camera, listed at $1; or an Ingersoll Watch or Cyclometer, each listed at $1; or a Recreation Waterproof Match Box, made by W. L. Marble and listed at $1; or a Shakespeare Revolution Bait listed at 75 cts.; or a Laughlin Fountain Pen; or a Cartridge Belt listed at $2; or a dozen Chatfield Trout Flies, assorted, listed at $1; or a Snap Shot Album, holding 400 4x5 views, and made by the Buechner Mfg. Co.

THREE subscriptions at $1 each, a copy of *The Battle of the Big Hole*, cloth; or a safety pocket ax, made by W. L. Marble and listed at $2.50; or a dozen Chatfield Bass Flies, assorted, listed at $2; or 4 dozen Carbutt plates, 4x5 or 5x7.

FOUR subscriptions at $1 each, a copy of *Camping and Camp Outfits*, cloth; or a Primus Oil Stove, listed at $4; or an Ideal Hunting Knife, made by W. L. Marble and listed at $2.50; or a .32 cal. Automatic Forehand Revolver, made by the Hopkins & Allen Arms Co.

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SEVEN subscriptions at $1 each, a copy of *The Big Game of North America*, or of *The American Book of the Dog*, cloth.

EIGHT subscriptions at $1 each, a Waterproof Wall Tent 7 x 7, made by D. T. Abercrombie & Co., and listed at $6.50; or a 4 x 5 Weno Hawk-Eye Camera, made by the Blair Camera Co., and listed at $8.

NINE subscriptions at $1 each, an Acme single shot gun, made by the Davenport Arms Co., and listed at $8.

TEN subscriptions at $1 each, a Cut-Glass Salad Bowl, made by Higgins & Seiter, and listed at $4.50; or a Conley Combination Hunting Coat, listed at $8; or a Yawman & Erbe Automatic Reel, listed at $6 to $9; or a pair of horse hide Hunting Boots, made by T. H. Guthrie, Newark, N. J., and listed at $10; or a Bristol Steel Fishing Rod, listed at $6 or less; or a Single Barrel Shot Gun made by Harrington & Richardson Arms Co.; or a Korona Camera, II–E., made by the Gundlach Optical Co., and listed at $10.

TWELVE subscriptions at $1 each, a Peabody Carbine valued at $12; or a No. 5 Sidle Telescope Rifle Sight, listed at $18; or a Davenport Ejector Gun, listed at $10; or a Korona Camera, II-F, made by the Gundlach Optical Co., and listed at $12.

FIFTEEN subscriptions at $1 each, a Shakespeare Reel, Silver Plated, listed at $15; or a set of rabbit plates made by Higgins & Seiter, and listed at $8; or a Field Glass, made by Gall & Lembke, and listed at $15;

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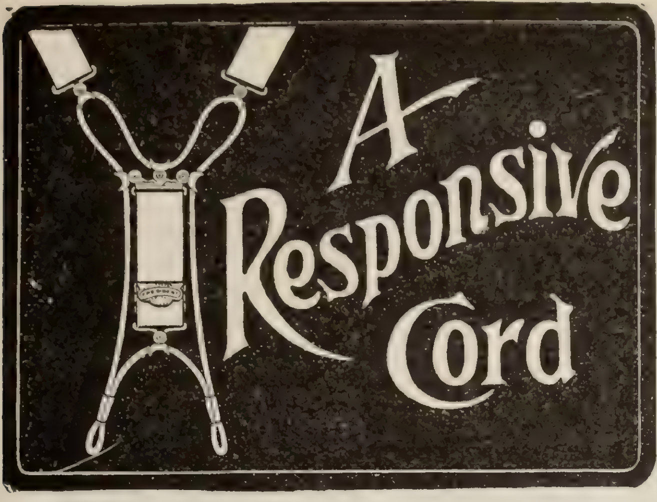

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I certify that I am eligible to membership in the L. A. S. under the provisions of the constitution, and refer to 2 League members (or to 3 other reputable citizens) named hereon.

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Following are names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

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A. T. Leeds, Darby, ditto
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NEW YORK.

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Cecil J. Huntington, Parkman, elk bear, deer, mountain sheep, antelope, grouse and trout.
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S. N. Leek, Jackson, ditto
James L. McLaughlin, Valley, elk, bear, deer mountain sheep, antelope, grouse and trout.
T. R. Wilson, Alta, Uinta Co., elk, bear, deer, mountain sheep, antelope grouse and trout.
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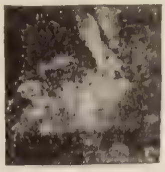

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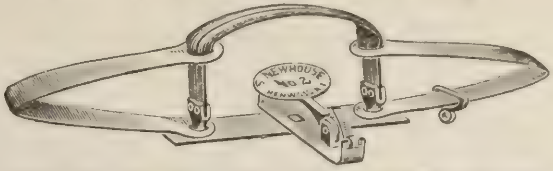

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COMBINED TONING AND FIXING.

Many persons believe that a combined toning and fixing bath will not give permanent results. It is no wonder such is the general idea; because only about 10 per cent. of the pictures so toned and fixed are permanent. The remainder change from their original tone to a yellowish green and fade away, generally becoming invisible within 6 months.

Yet some of our most able professors in the art are of opinion that a combined toning bath, prepared as it should be, will give more permanent results than the single toner used by professional photographers to-day.

I had occasion to place in a show case, side by side, prints toned in a combined bath by an amateur, and some toned in the single way by a leading New York photographer. At the end of 3 months, during which the prints had been exposed to the sun, I noticed the combined prints showed but little signs of fading, and that the others were faded badly. This led to further experiments, and the prints were kept exposed nearly 3 years. The combined prints have held out and do not appear much more faded than at the end of the first 3 months, while the others have almost disappeared. However, all combined baths will not give good results; in fact, nine-tenths of them are no good. Prints toned in them have no chance of remaining permanent. These poor, cheap baths are made by people who know little or nothing about the business, and contain nitrate and acetate of lead, alum and hypo. Although they will change the color of prints placed in them from red to brown, still they will give what is known as a sulphur tone, caused by the acid in the prints decomposing the hypo in the bath, thus liberating free sulphur. This, acting on the silver in the print, forms a compound which, when the prints are exposed to the air, uniting with the oxygen, causes them to assume that sickly yellowish green color and fade away.

It is absolutely necessary for a good combined bath to contain chemicals which will prevent the decomposing of the hypo, and it is also necessary that they contain the required quantity of gold chloride, to give the proper tone to the prints.

Another great fault in some toning baths is that toning is accomplished in too short a time. To preserve color in the print, it is necessary to remove it from the bath before it has had a chance to thoroughly fix. Prints should remain in a combined bath at least 12 minutes to insure thorough fixing, and a bath that will not tone in less than 20 minutes is still better. The amateur using a combined bath should not be impatient if the prints take a long while to reach the desired tone, knowing that they are more likely to remain permanent. When buying a combined bath do not look for the cheapest, but rather look for one which bears the name of a reliable manufacturer. A combined bath can not be manufactured cheaply; to make a good one, requires not only a chemical experience of years, but also the use of expensive chemicals.

For those, however, who prefer to make the solution themselves, I suggest the use of the following formula:

Phosphate of soda.............	60 grains
Sulphocyanide of ammonia.....	100 grains
Hyposulphite of soda..........	1000 grains
Water	8 ounces
Gold chloride	4 grains

If this bath tones in less than 12 to 15 minutes, dilute the solution.—F. S. Drumane in Photo Record.

SOME SPECIAL METHODS FOR MARINE WORK.

Work around the water is the hardest thing a photographer can try, though nearly everyone thinks the contrary. It is extremely hard to make the sea look wet in a photo, as it often does in paintings. Most photos of water are lacking in transparency, color, depth, wetness, beauty or truth to nature. It is also difficult to represent motion of waves or of what rides the waves. Pictures of yachts often fail utterly to convey any idea of the speed they are maintaining. To photograph a rocky coast, with surf dashing on it, the water wet, the waves in motion and the exposure right for black rocks, white sand and breaking surf, is apparently impossible. A great deal more thought is involved in a half perfect marine photo than in a fine one of a landscape.

The color of the water is most satisfactorily represented if Carbutt's orthochromatic plates are used. Sometimes I use a light yellow screen, made with extract of barberry root and gum acacia, sometimes a light blue screen; often none at all. The Carbutt ortho plate of highest speed is always placed in the holder in the dark, and I use covered trays in development. For developer nothing else is equal to Carbutt's old pyro-soda potash formula, and those who compound it carefully will not regret it. The formula is given in the instructions sent out with each box of plates. The plate is sensitive to each trifling addition of pyro or alkali. The way to get results is to begin with weak developer and strengthen as may be desired. With care it can be made to produce a perfect negative. It is without equal for all greens nd blues. We hear a great deal about the blue sea; if the water reflects the color of the sky it ought to be blue; but the nearer I get to water the oftener I find it green to my eye, and when I have treated it as green I have come nearer to picturing wet water than at other times. Distance on the water is often blue and purple, but near water is generally green.

What shutter to use is a problem, for it is sometimes necessary to do 2 things in exposing which are contradictory; that is, make a slow shutter exposure to imply a little motion and at the same time a rapid one to get a clear picture. If the photographer is in a small boat the top speed of a really good shutter will be a necessity, else he will obtain the same effect he would on land making a time exposure with a shaking tripod. A focal plane shutter seems the best for the work, and next best is a drop shutter worked sideways by a rubber band and having a narrow slit instead of a round opening. The slit may vary from ¼ to ½ inch in width. I used such a shutter many years, and obtained satisfaction from its work. It should be placed on the lens so as to slide in an opposite direction from that of the vessel to be photographed. Such a shutter can be easily made at home, and does not cost a cent. If the slit be narrow enough and the shutter sent in cross direction from that of the object, some difficult work can easily be done by using this simple shutter. For work from the shore where the camera is on stable ground I always make a slow snap and seldom stop my lens down small. Slow exposures, showing some of the waves not too sharp, convey more sense of motion than fast ones. I may lose the fine spray in detail, but to compensate me I get waves that seem to be rolling in, surf whose motion does not appear suspended. If one is on a large boat and the sea is comparatively smooth a compromise may be made between the slow and the rapid exposure. This will help both the water value and the motion of the object pictured. Of course such a plate must be treated as over exposed, and developed accordingly; but with an over exposed ortho plate I am sure not to have chalky white sails, harsh lights or troublesome developing. I never like the light full on my subject. Get between the light and the object. If one is in a boat on a rough sea he should keep one eye on the finder and the other on the boat's motion, and select such time for releasing the shutter as exists between each rise and fall. There is one brief space between each motion when rising has reached the climax and falling has not begun, and that is the time to snap. Do not use a tripod, but hold the camera, no matter how large, in the hands. A tripod is a good thing ashore, but not afloat.

I have improved my work greatly by using EWN Non-Halation Backing. My outfit consists of one 8 x 10 camera, with focal plane shutter and lenses of 8, 12, 16 and 22 inch focus. Having my shutter at the rear of the camera and each lens with an adapter so that all fit the one flange on my front board, I am not burdened with extra shutters, fronts and the like. Besides the camera and lenses I have 12 holders and a changing device, which is ordinarily flat, but which, at the touch of a spring, jumps out like an opera hat, and becomes a box with sleeves. This is necessary on many occasions when 30 to 50 plates may be exposed in a day's cruise, and I don't want to go below to change plates in a leaky dark room. Those who have few holders would better make a rubber cloth bag lined with red or black flannel. Failing in that, use Eastman's film. Give all the time the motion of your vessel will permit; develop tentatively; avoid direct lighting; open your lens and use a slide shutter; keep one plate for the unexpected; stay amidship rather than forward or aft; and print on glossy paper if you want the water to look deep and wet.—Peter Young, in The Photo-American.

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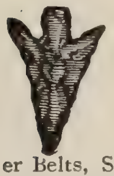
D. W. CREE, Manufacturer, Griggsville, Ill.



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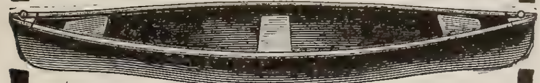

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"Oh, pshaw! nature never had such bad intentions as that."—Exchange.

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Maid—Think ain't no name for it, mum—I worry!

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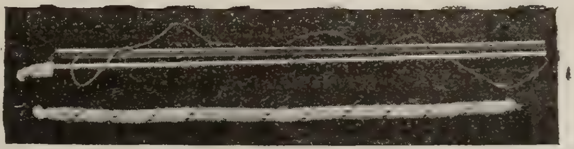

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FIXING AND WASHING NEGATIVES.

Recent experiments have demonstrated that a strong solution of common salt is preferable to alum after fixation, where negatives show a tendency toward frilling. There is no danger of precipitation of sulphur in the film, and the salt has the effect of shortening the time required to eliminate the hypo. Frilling will sometimes appear in one make of plate and not another, or, it may be, in a different batch of the same make. It is produced by a strong alkali, soda caustic or potash. Modify the composition of the developer, or substitute a milder alkali, ammonia or bicarbonate of soda, and the frilling will disappear.

The acid-alum fixing bath now being so generally recommended, has a tendency to degrade or destroy the negative. Moreover there does not seem to be any real reason for its use. Why add any foreign matter to the fixing bath for the purpose of keeping it clear or preserving its usefulness for weeks. Hypo is the cheapest chemical in our laboratory, and economy here is short sighted policy. Make a fresh, clear solution for each batch of plates, and make it strong enough. You will notice the hardening action on the film, and the negative will be bright and clear without the aid of acid or alum.

In the operation of fixing there has been a large measure of backward movement, and doubtless the evil results of it will be manifest in due time. To follow an alkaline developer with an acid fixing bath is wrong in principle and dangerous in practice. Stainless and otherwise perfect negatives can be produced when an alkaline fixing bath is used, and such negatives are free from the doubts that must always follow the use of an acid bath as to the unchangeableness of the negatives. Alum is now unnecessary except under unusual circumstances, employed after fixing and washing if the film is soft, and the image easily injured by rubbing it with a pad of cotton wool. After an alum bath, a previously tender film surface may be well rubbed to free it from impurities such as deposits from the water used, adhering dust particles, etc., and the advantage of this cleansing will be found, not only in a better appearance, but in a greater freedom from spots in the print, and a greater ease in varnishing. Alum should on no account be used before fixing, and many plates do not need its application at all.

The washing of gelatine negatives seems a simple matter, but there is still much misconception concerning it. When gelatine plates were first used they were insufficiently washed, because photographers did not recognize the great difference between a gelatine and a collodion film. After that the time of washing was extended a little. Now some advocate less washing. It is impossible to wash a gelatine film rapidly by any manipulation of the surface, whether by jets of water impinging on it, by wiping off the adhering water and putting it into fresh, or by any other process. These operations affect the surface only, and hasten to only a small extent the gradual passage out of the solution that has been absorbed by the gelatine. Soaking alone can effect this, and at best it is a slow operation. It is unsafe to leave a negative only partially washed, for in such a condition it can not be guaranteed to last unchanged. A well coated plate, such as good photographers prefer, should have at least 2 hours of washing, but a thinly coated plate, like some of the cheaper kinds on the market, may, perhaps be equally well washed in one hour. These times are the minimum. It is preferable to double them. This washing only needs to be done once for each negative, namely, after fixing.

When several plates are to be fixed at the same time, a grooved tank is indispensable, although they can be fixed if placed face up in a tray, provided the hypo is fresh and filtered. In the after washing, however, if left long in one water, unless it is kept in motion, the washing is immeasurably prolonged if the plate is laid face upward. The hypo, being of heavier gravity than the water, rests on the surface of the film; whereas, if the plate is placed film down with considerable water space below, or if placed upright in grooved tank with clear space at the bottom, the hypo will dissolve out with great rapidity. Plates may be washed face up in a tray by using a strong solution of common salt and water. This is of heavier gravity than the hypo, which rises to the surface, making way for the salt and water. Prolonged washing or soaking is almost as dangerous to the negative as too short.—J. P. St. Clair, in the Camera and Dark Room.

PASTE IT IN YOUR HAT.

The fourth annual meeting of the L. A. S. will be held in Indianapolis, Ind., on the second Wednesday of February, 1902. Eligible for membership therein:

All general officers of the League.

All chief wardens, vice wardens and secretary-treasurers of divisions.

All delegates chosen by the several divisions, and the chairmen of all standing committees.

Members who may determine to attend are requested to send notice to the Secretary at once, in order that a hall of suitable size may be engaged and proper arrangements made for hotel and other accommodations. We hope to have at least 30 States represented in this meeting. We especially invite all local wardens to be present. It will greatly benefit the cause to have the members from various States and from various portions of each State meet, become acquainted, exchange views and ideas, and thus fit themselves for better and more effective work at home.

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Chas. Barnhart, Rochester, N. Y.

Am more than pleased with the gun you sent me. I advise everybody to try for RECREATION premiums; it is like finding things.
Hugh McNaught,
Chicago, Ill.

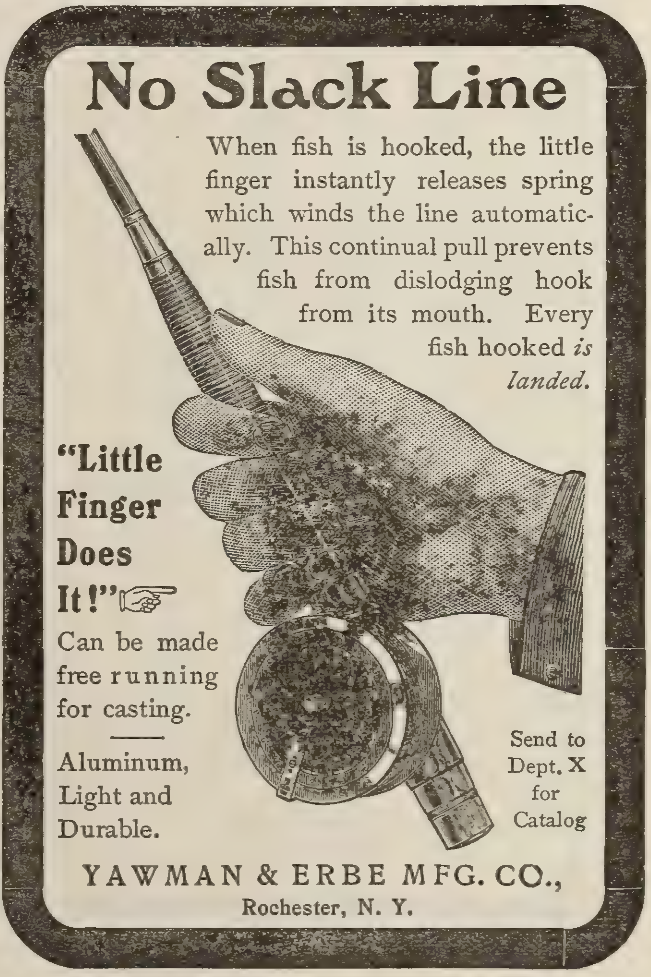
Accept my thanks for the Marble pocket axe you sent me for 3 subscriptions to RECREATION. It is a beauty.
Thos. E. Craine, Butte, Mont.

I received the Wizard B camera. Have tested it and find it all anyone could desire.
F. W. Gerow, West Edmeston, N. Y.

The Cyclone magazine camera you sent me for 7 subscriptions is a hummer.
Henry Kelsey, Benton, Ia.

I am more than pleased with the tent and fly you sent me as a premium.
J. S. Hagenow,
So. Manchester, Conn.

Your magazine is very interesting to all who have a sporty streak in their blood.
F. K. Swift, E. Falmouth, Mass.



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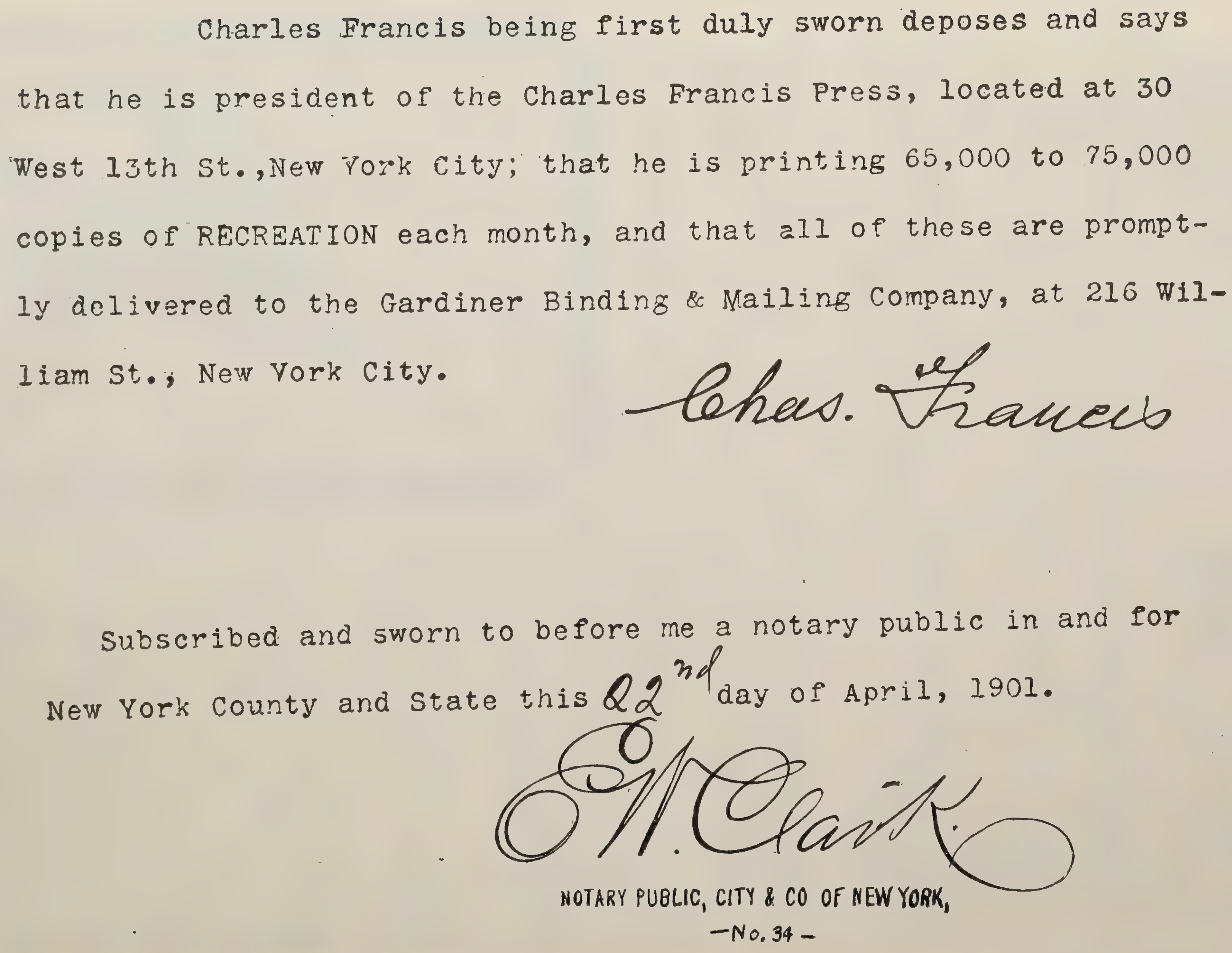

Charles Francis being first duly sworn deposes and says that he is president of the Charles Francis Press, located at 30 West 13th St.,New York City; that he is printing 65,000 to 75,000 copies of RECREATION each month, and that all of these are promptly delivered to the Gardiner Binding & Mailing Company, at 216 William St.; New York City.

Chas. Francis

Subscribed and sworn to before me a notary public in and for New York County and State this 22nd day of April, 1901.

E. W. Clark.

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TO ESTIMATE CORRECT EXPOSURE.

When estimating exposure, says F. C. Lambert in the Amateur Photographer, there are no less than 6 factors to be taken into account.

First, time of year, or, briefly, the month. Midday sunshine on Christmas day is not equal to that on midsummer's day. Outdoor photography is practically over by 4 or 5 o'clock on a December afternoon; while at the same hour in June or July we can often get good exposures in a small fraction of a second.

Time of day is another factor. In August, for example, about 4 o'clock in the afternoon double the exposure would be required that would be necessary at midday; and at 5 or 6 o'clock the same afternoon it would be necessary to double this again, or give 4 times the midday exposure.

Weather must be studied. While not under control, observation will teach the strength, or quality and quantity of light available.

Speed of plate is, to some extent, under control, for we can buy quick, medium, or slow plates. It is not desirable for beginners to change their brand of plates oftener than they can help; but the experienced worker will learn to appreciate a slow or a quick plate as an advantage under certain conditions.

Subject classification is important.

The stop is another factor of importance in estimating exposure. Let the beginner here pause, and carefully consider what happens when he changes the stop, say, from f/8 to f/16. Firstly, f/16 is a smaller opening than f/8. It is, in fact, only ½ as wide, and therefore ¼ as large in area as f/8. It therefore admits only ¼ of the light for the same shutter speed; consequently, to bring exposures with f/8 and f/16 to an equality, we give with f/16, the smaller stop, 4 times as long an exposure as with f/8.

But not only does f/16 reduce the light to ¼ of what it was with f/8, but also it increases the range of objects in focus. For example, suppose we are using a lens of about 5½ inches equivalent focus, and we focus as sharply as possible for an object 10 feet away; then, with f/8 we should find a fairly good range of focus for objects up to about 7 feet from us, and as far away as 14 feet, i.e., our practical range would extend from about 7 to 14 feet. If we simply change the stop f/8 to f/16, we should then find we might have objects as near as 6 feet from the lens, and as far away as 25 feet. By changing the stop from f/8 to f/16, we have extended the focal range from 7 and 14 to 6 and 25 feet.

Thus, changing from a large to a smaller stop means increase of exposure, and at the same time increases the range of distance for objects clearly defined. The former is important when estimating exposure; the latter, when considering the artistic qualities of the picture.

Therefore the general rules to be deduced are:

As the time of year passes from December to June, increase the exposure.

As we pass away from midday to forenoon or afternoon, increase the exposure.

As the light passes from brightest to bright, dull, gloomy, etc., increase the exposure.

As the plate speed changes from a low number, say 50, to a high one, say 250, reduce the exposure.

As we pass from a small f number, say f/8, to a higher number, say f/16, increase the exposure.

As we pass from a distant or a well-lighted object, say panorama, or cottage in the open, to a near or poorly lighted subject, as a foreground landscape or a similar cottage under trees, increase the exposure.

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21 ft. Truscott

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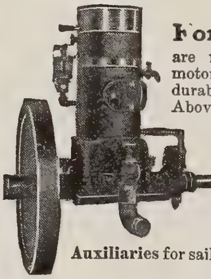

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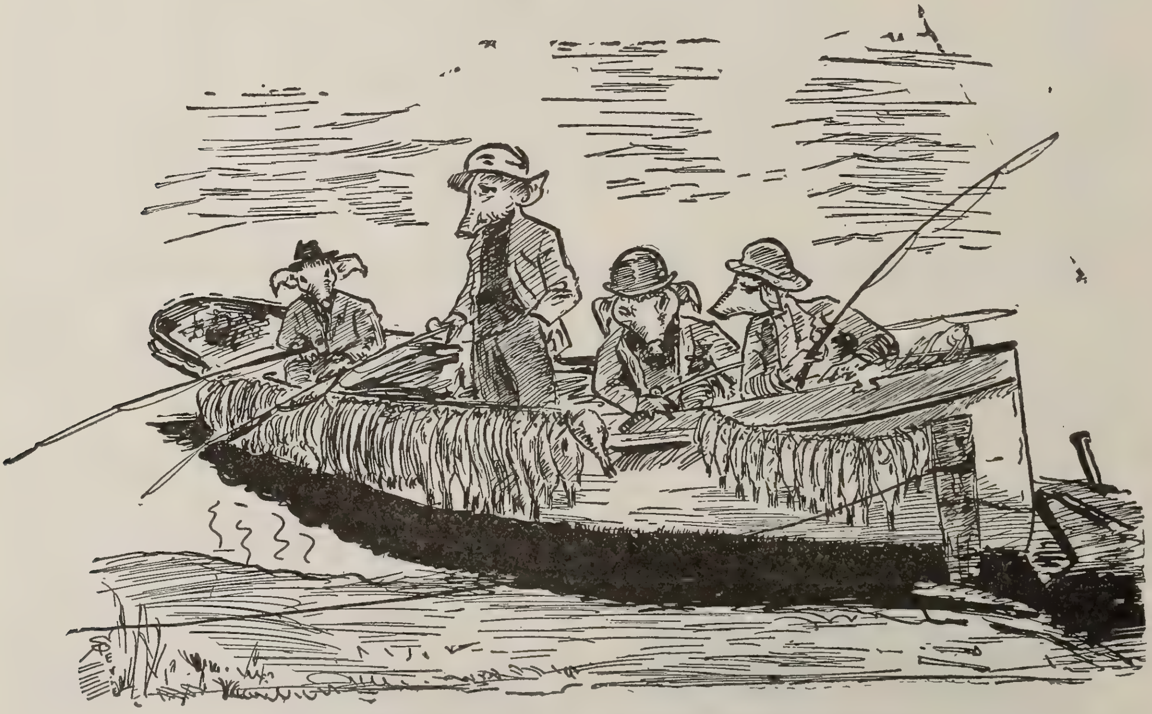

AS AN ARTIST SEES THE BERLIN HERD.

(See December Recreation, p. 442.)

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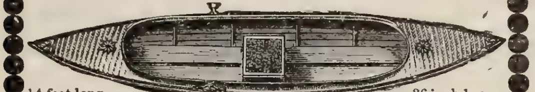

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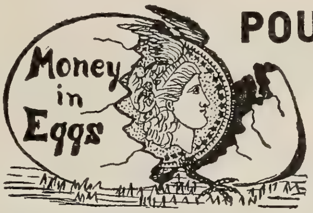

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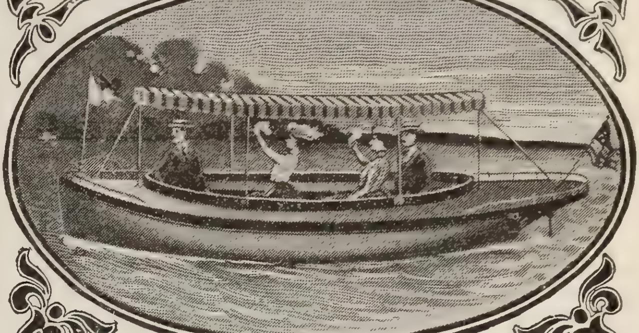

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C. L. Moncure, Bastrop, Tex.

I received the Bristol rod and have given it a fair trial on black bass. I find it O. K. No fisherman's outfit is complete without one. Please accept thanks for it.

W. E. Brott, Owosso, Mich.

I received the Bristol steel rod. It is the finest and best balanced rod I have ever seen, and I am not a novice. Many thanks for your kindness and prompt attention.

H. B. Harmer, Ashbourne, Pa.

I received the Horton rod you sent me as premium in good condition. The Horton Mfg. Co. deserves credit for the way it packs goods for shipment.

E. Brady, Emporium, Pa.

Accept my sincere thanks for the Bristol rod you gave me as premium for a club of subscribers to Recreation. The rod is satisfactory in every way.

C. B. Bleibel, Denver, Colo.

Have received 5 Horton rods as premiums for subscriptions. Have thoroughly tested them and find them far ahead of any split bamboo rod.

C. Arnett,
Fairmont, W. Va.

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C. E. Wallin, Selma, Ala.

I thank you sincerely for the Bristol steel rod. It is the 3rd premium you have given me, and, like the others, is more than satisfactory.

G. B. Hare, Waterbury, Conn.

I received the Bristol steel rod you sent me in return for 5 subscriptions. Have given it a good trial, and am greatly pleased with it.

John James, San Antonio, Tex.

The Bristol rod which you sent me has been thoroughly tested and has proved entirely satisfactory. Please accept my thanks for so valuable a premium.

A. Martin, Alliance, O.

I thank you for the Bristol rods I received for getting up clubs; also for the rods that Thos. J. McCann and S. E. Kennedy received.

William Greiner, Crescent Hill, Ky.

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E. G. Jones, Providence, R. I.

The Bristol rod I received from you as a premium is a killer. Took it out for trout the 1st of May and landed 39 fair ones.

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J. F. Van Voorhis, Newark, O.

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I received the Bristol rod in good condition. I thank you for it and for its prompt delivery.

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Received Horton rod and Marble pocket knife, and am extremely pleased with both. I thank you for them.

W. E. Bordeau, Elgin, Ill.

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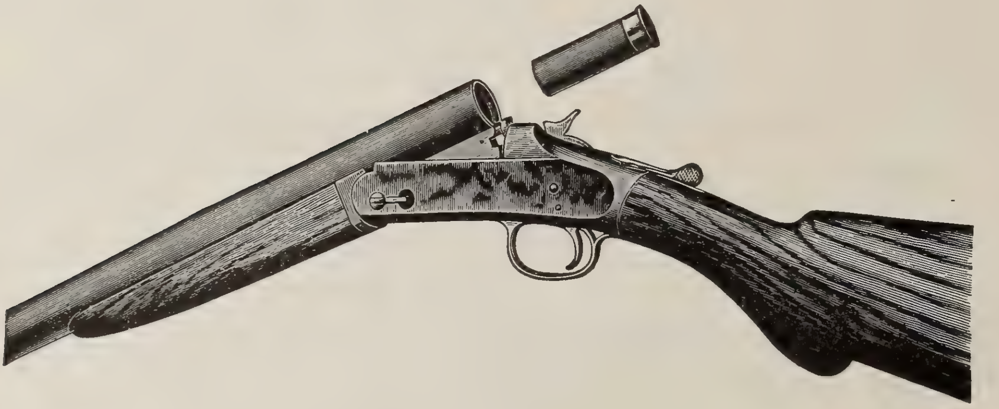

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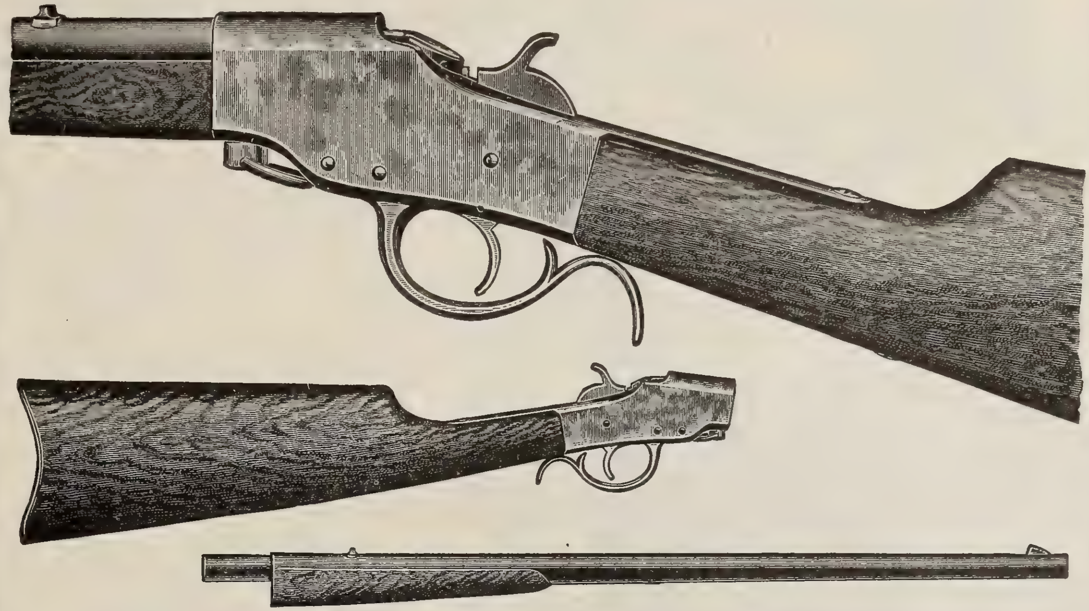

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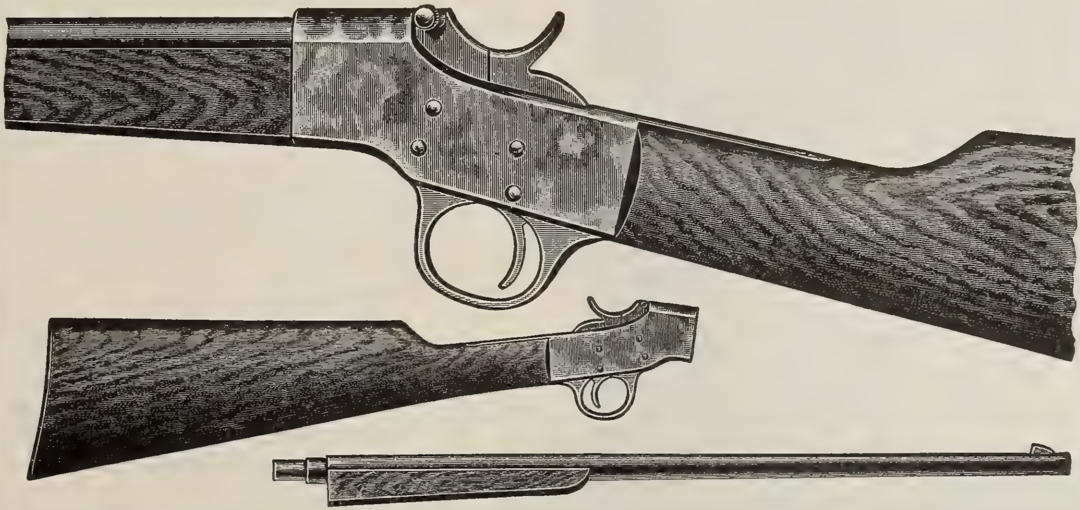

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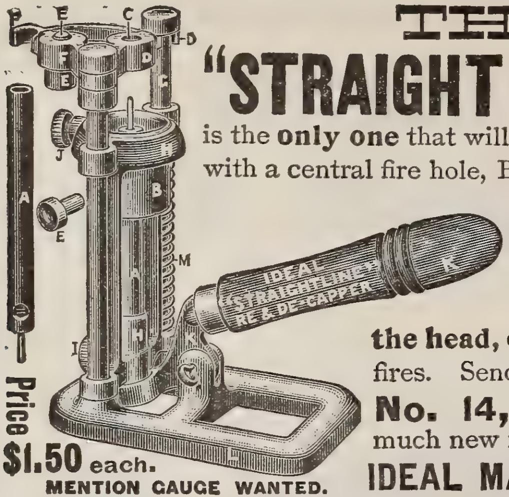

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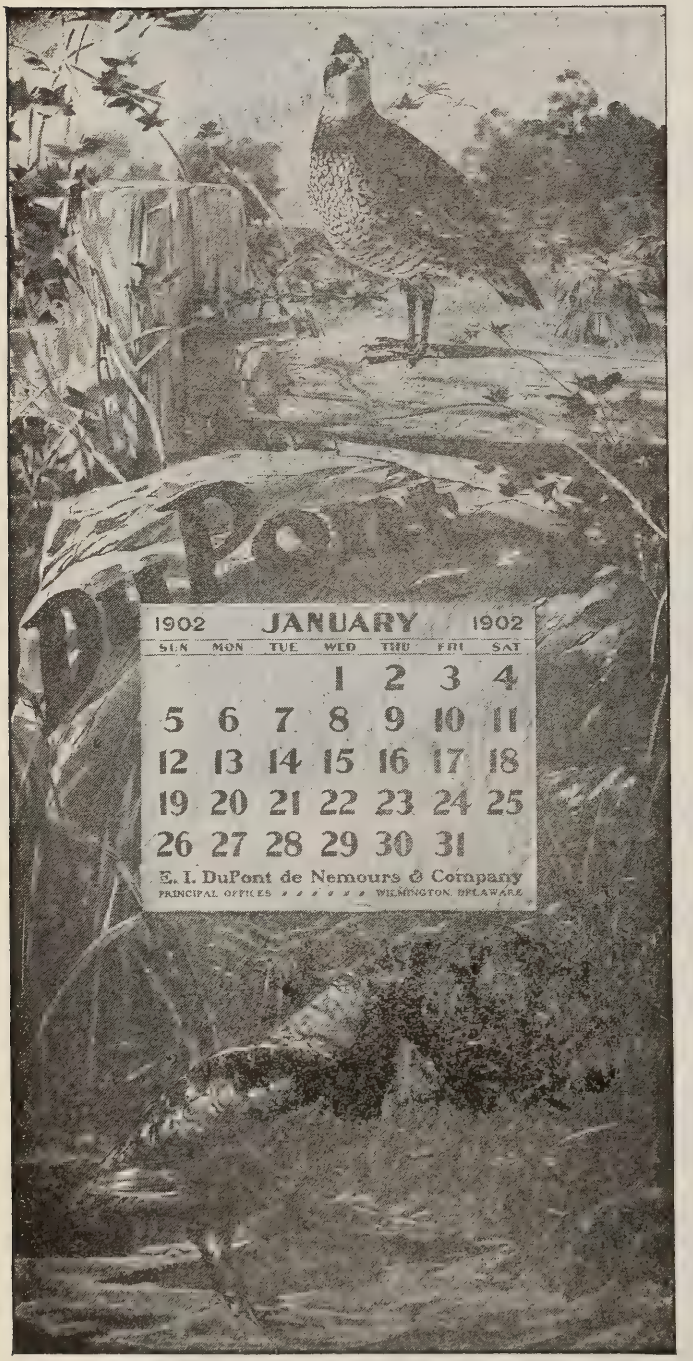

1902 JANUARY 1902

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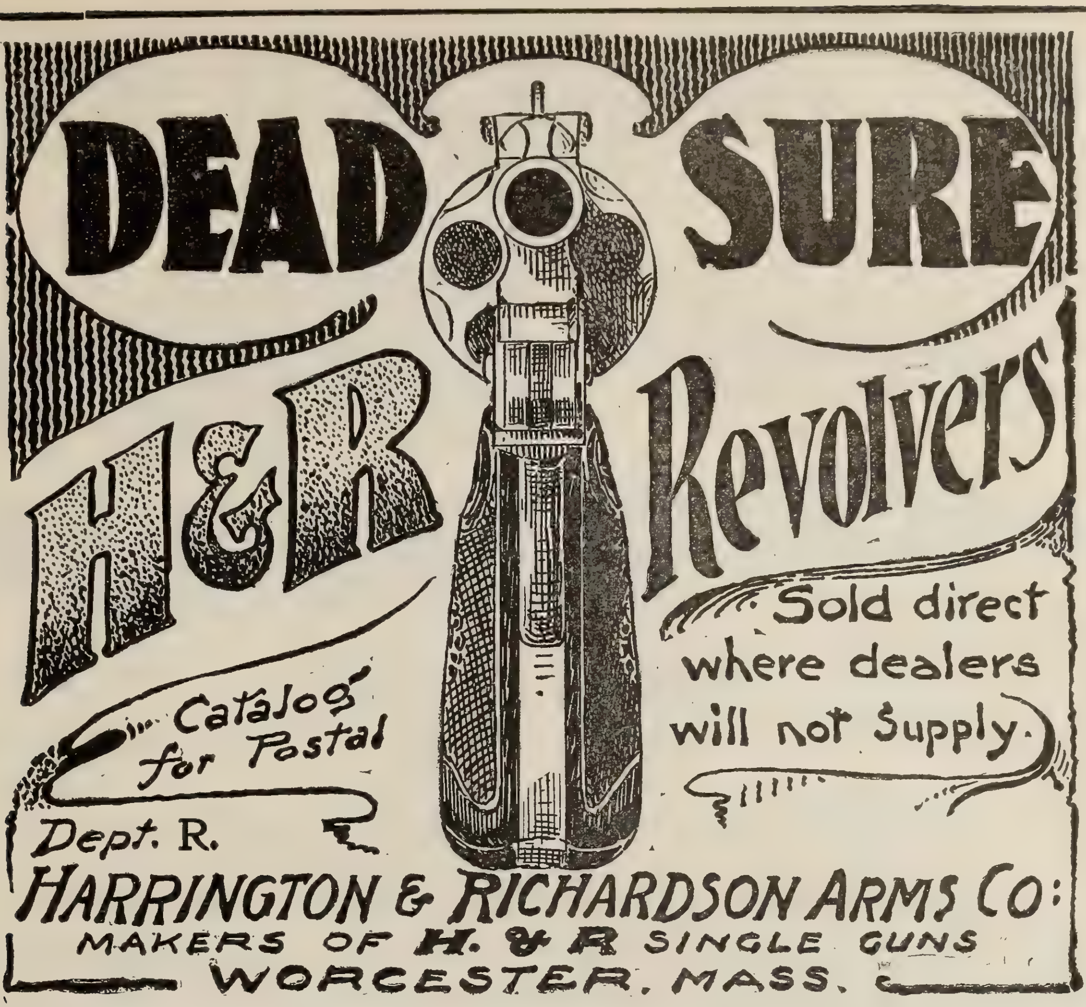

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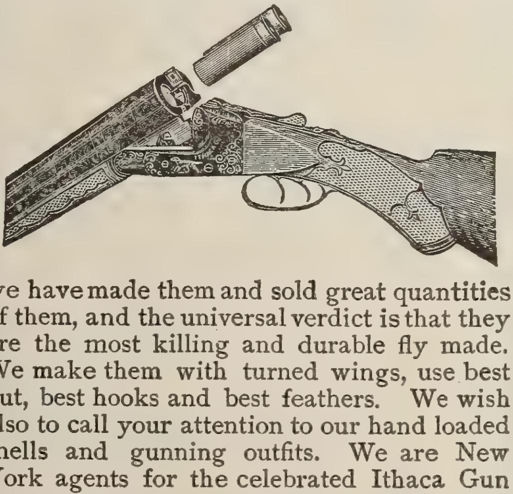

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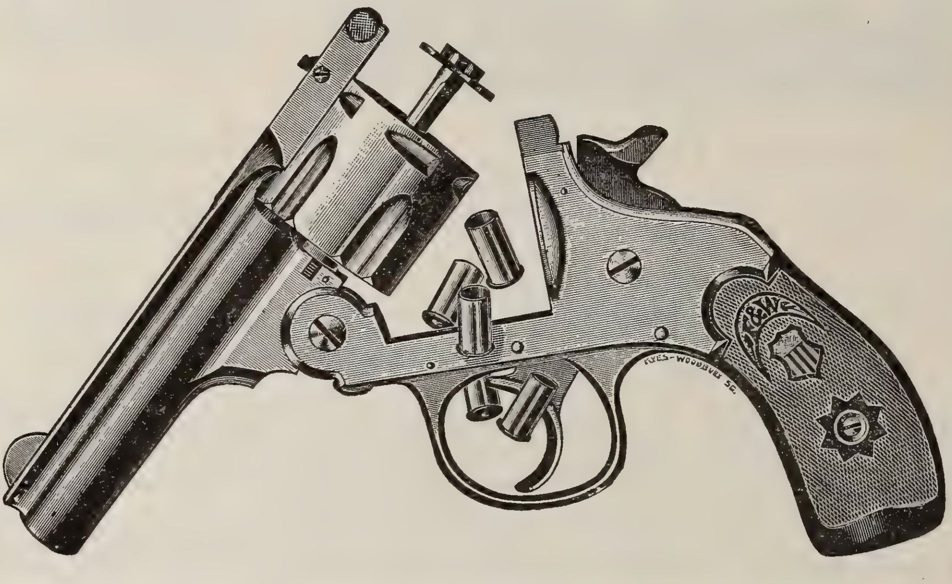

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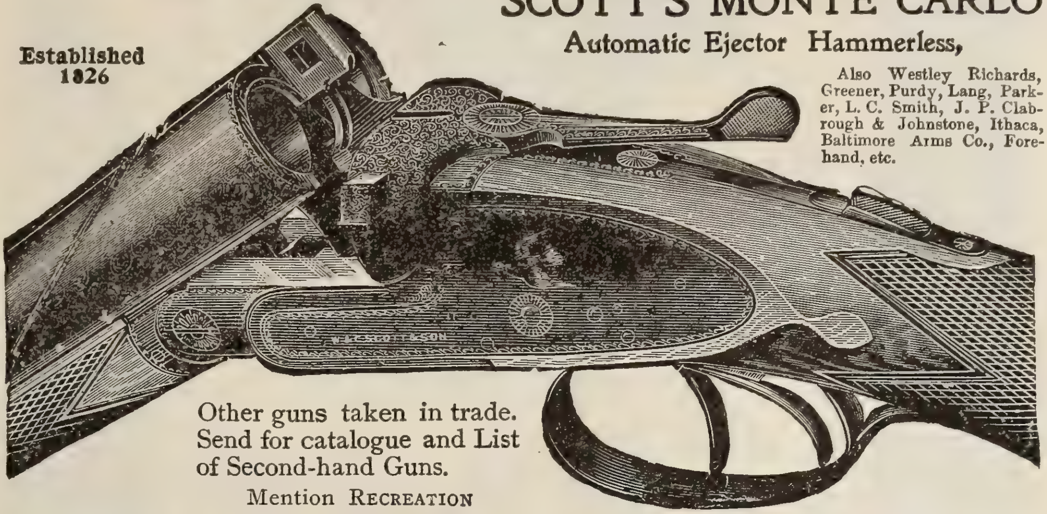

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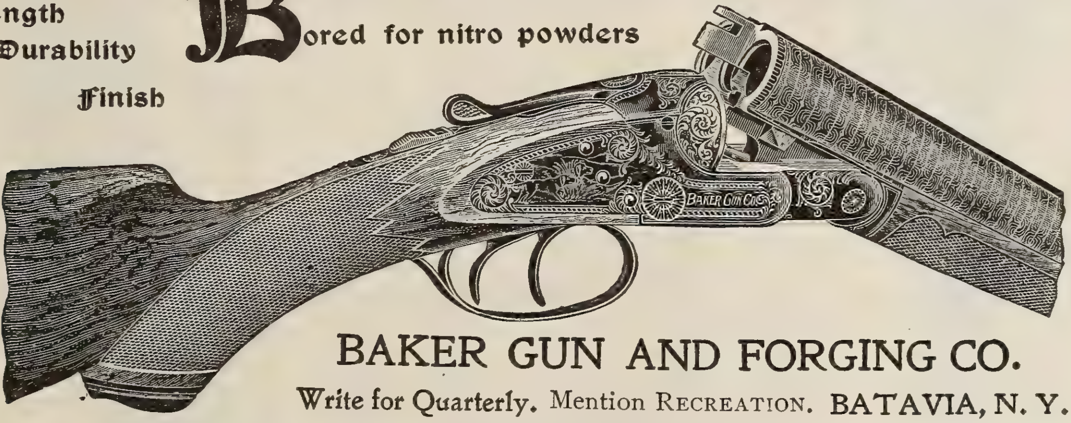
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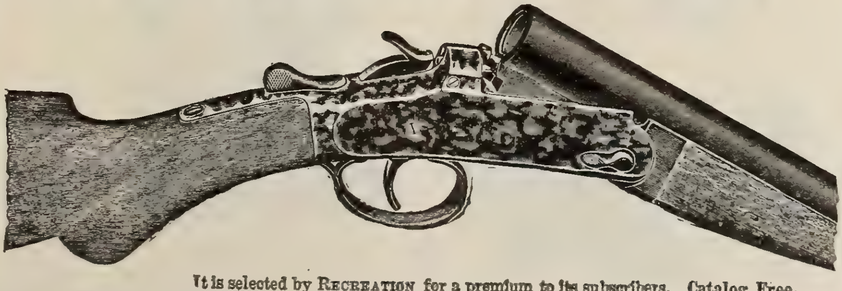

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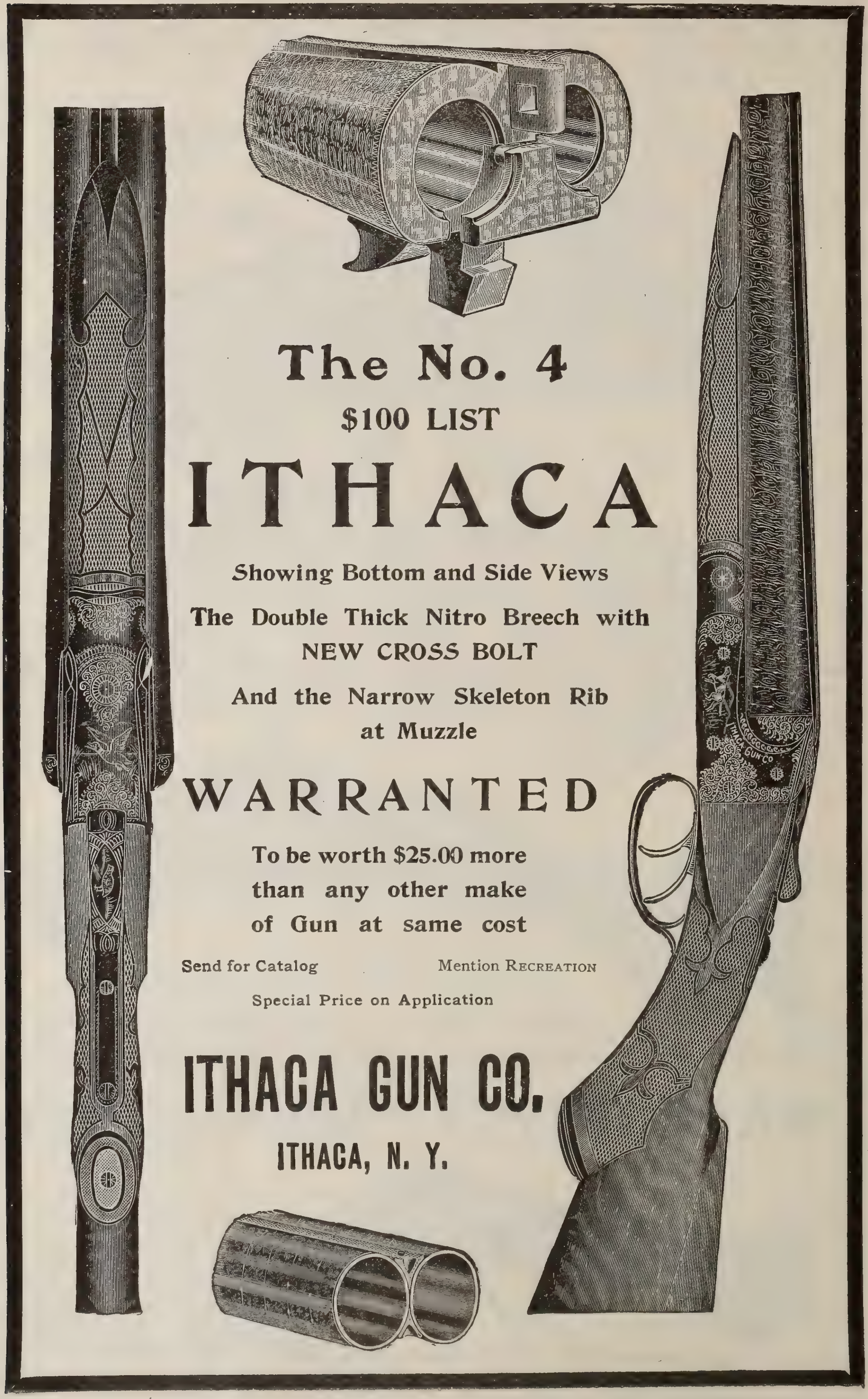

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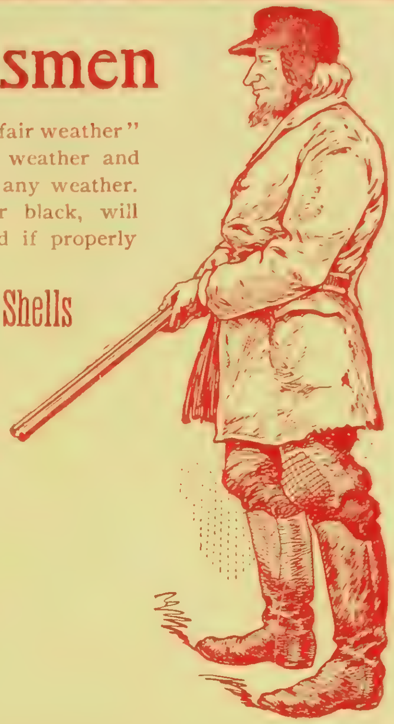

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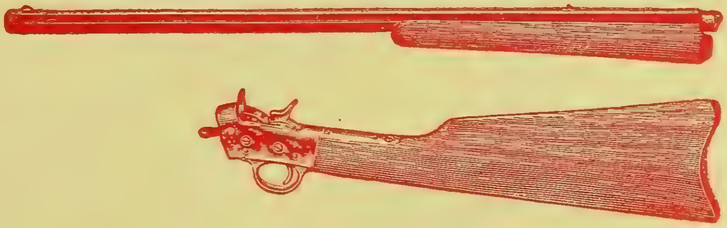

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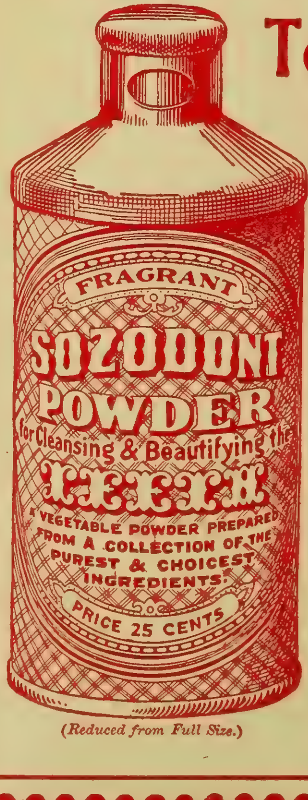
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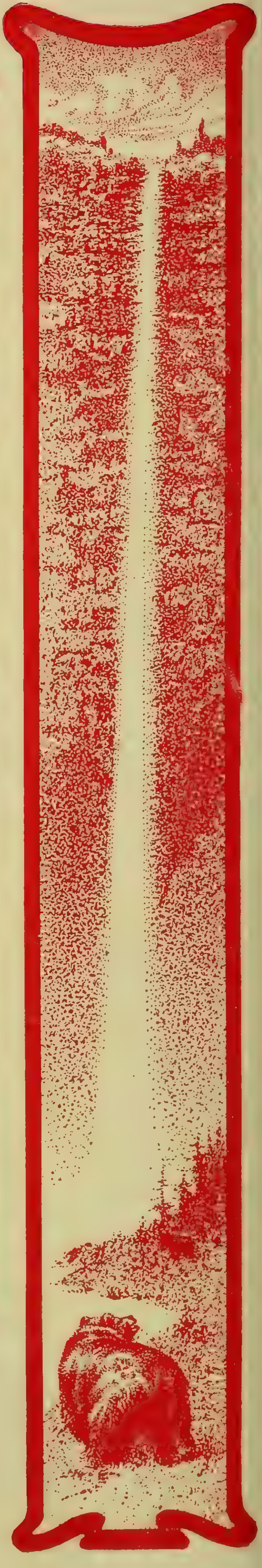

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CONTENTS OF THIS NUMBER

PAGE
Each Trailing Our Fiery Serpent of Hemp, and Both Feeling It Was Likely to Be Our Last Ride DAN SMITH .... FRONTISPIECE.
Fighting a Prairie Fire. Illustrated .... RAMSAY MACNAUGHTON 167
Hunting the Bighorn in British Columbia. Illustrated .... STANLEY WASHBURN 169
Through Colorado Canyons .... DR. J. E. MILLER 171
With the Leading Ouananiche. Illustrated .... J. L. MOTT. 3d 173
That Boy. Poem. Illustrated .... LEWIS A. BROWNE 175
Jerry Poland and the Grizzly .... REV. FRANCIS HOPE 177
The Good Chap. Poem .... THEODORE ROBERTS 177
The Master and Tenny. Illustrated .... J. L. TUCKER, JR. 179
Quiz: A Kangaroo Rat. Illustrated .... H. A. THOMPSON 183
Bears that Climb .... T. B. CRAPO 185
A National Game Preserve in Alaska .... W. T. HORNADAY 188
March. Poem .... A. L. VERMILYA 190
The Olympics and Their Elk. Illustrated .... F. A. JOHNSON 191
Fishing at "Cayugy Bridge." Poem .... G. A. WARBURTON 194
Congress Has Full Power .... HON. JOHN F. LACEY and HON. P. C. KNOX 197
The Predicaments of a Poet. Poem .... CHARLES N. DOUGLAS 203
From the Game Fields 204
Fish and Fishing 211
Guns and Ammunition 214
Natural History 221
The League of American Sportsmen 228
Forestry 232
Pure and Impure Foods 235
Book Notices 237
Editor's Corner 238
Publisher's Notes xxxi
Amateur Photography 241

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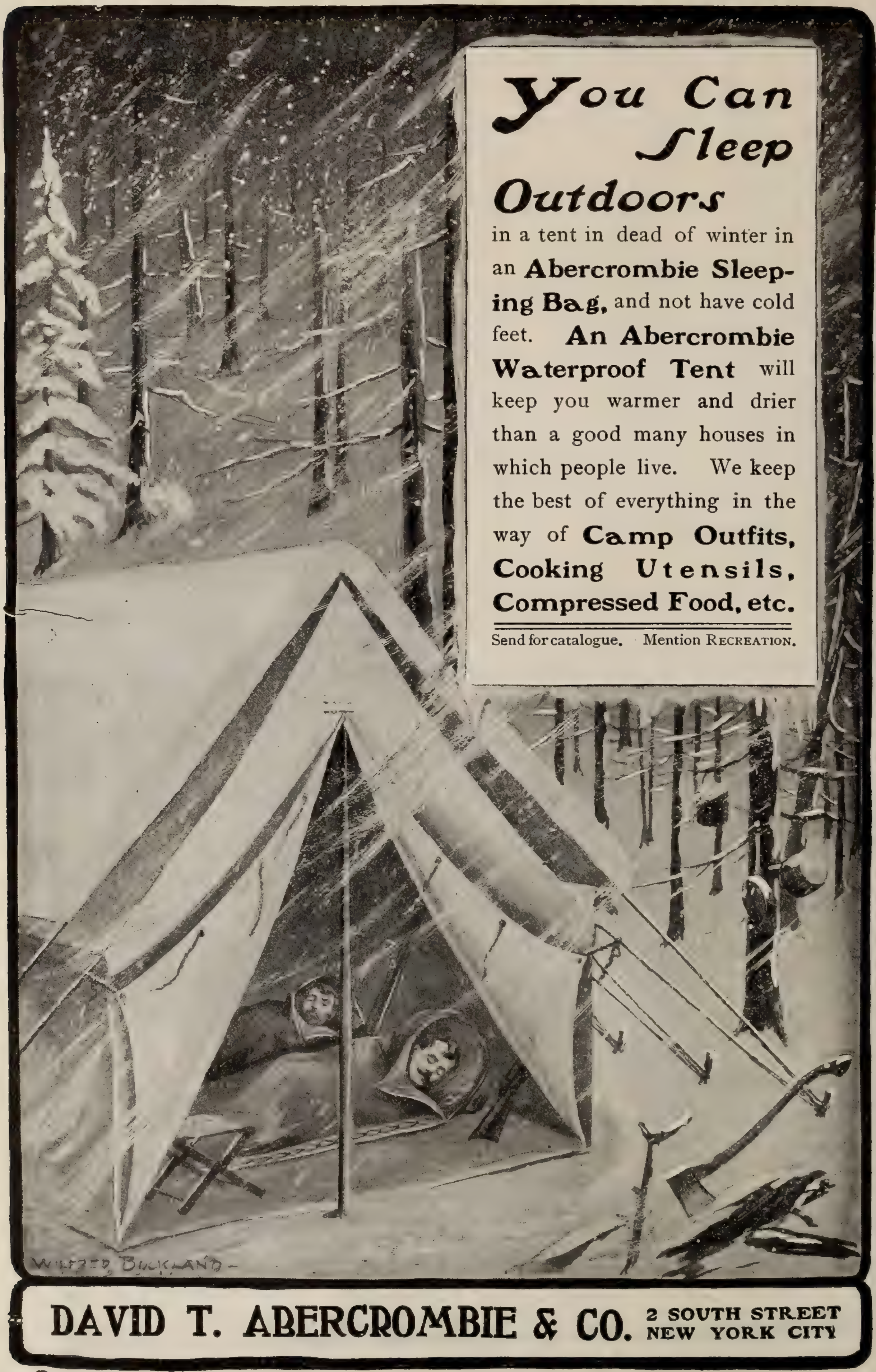

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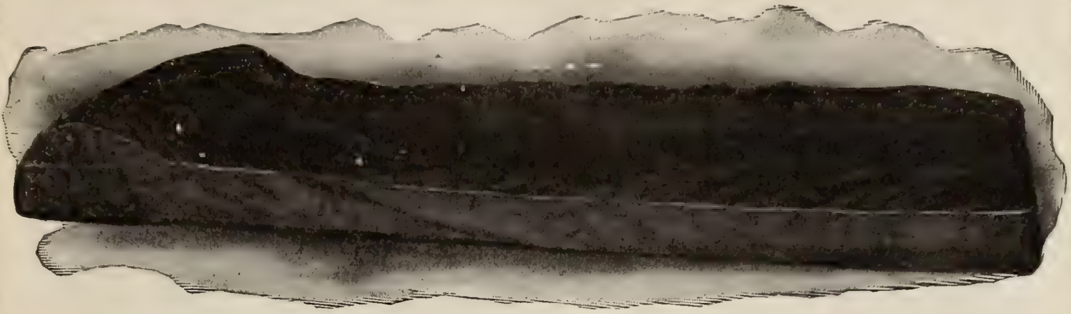

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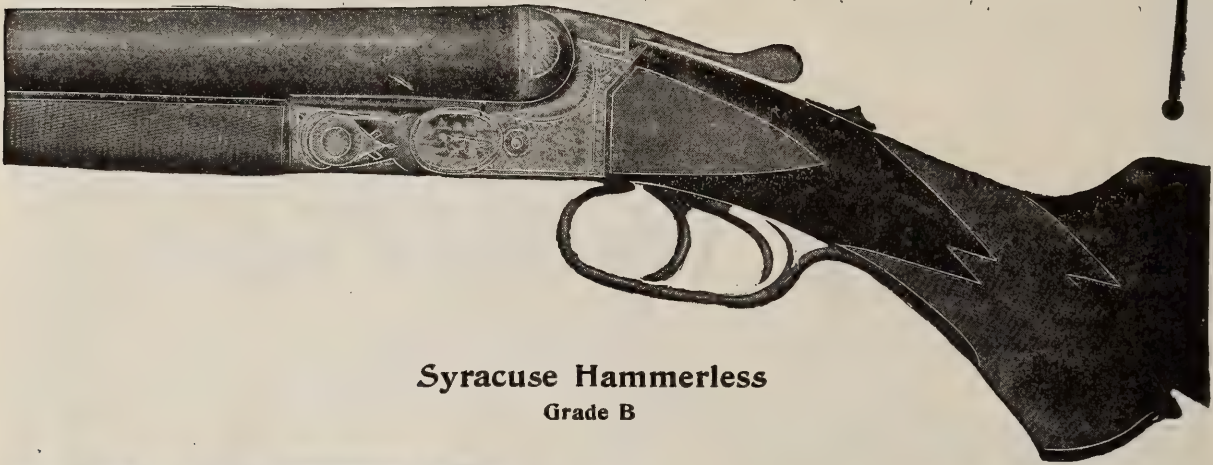

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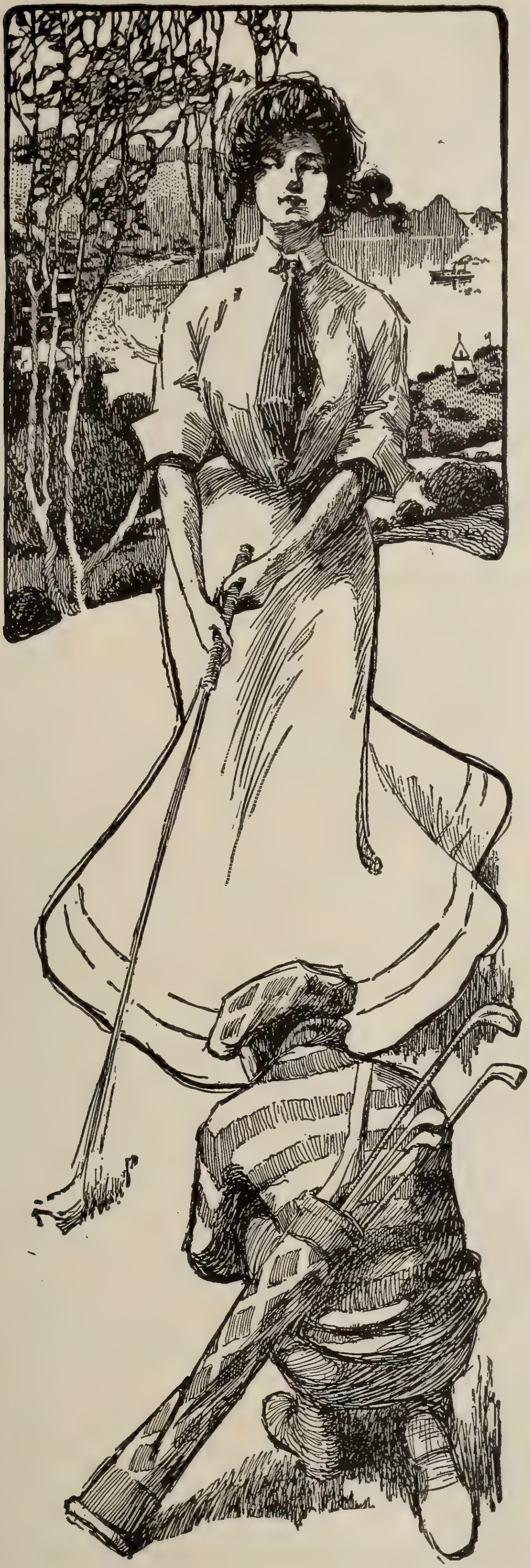

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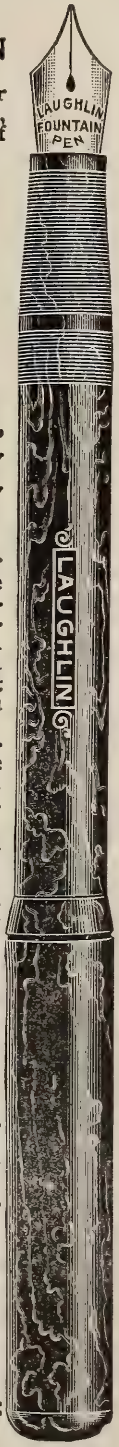

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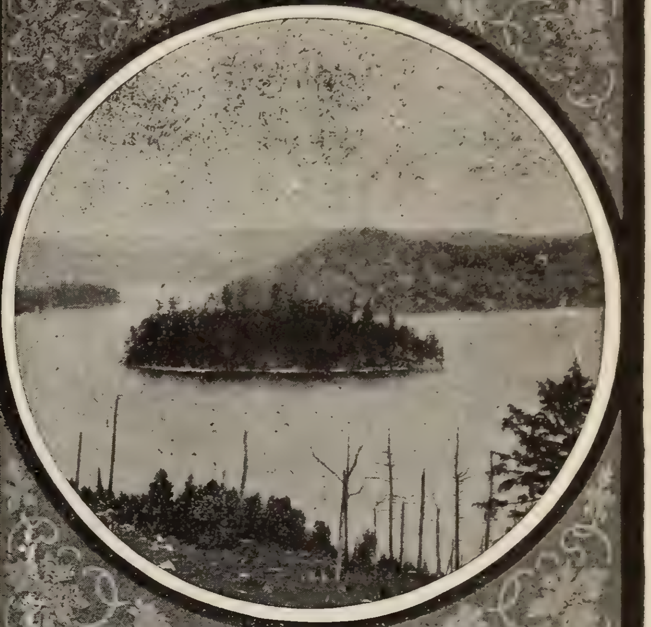

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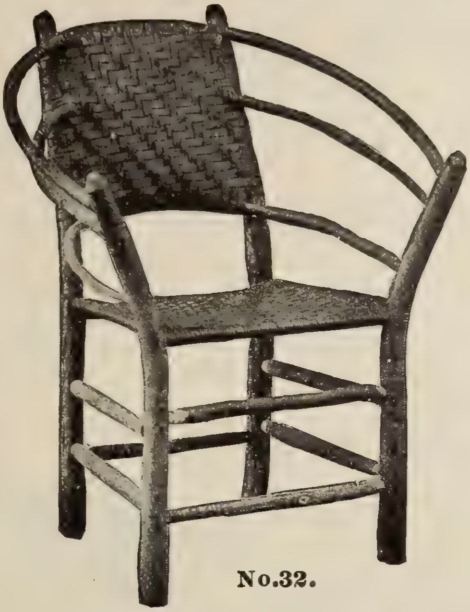

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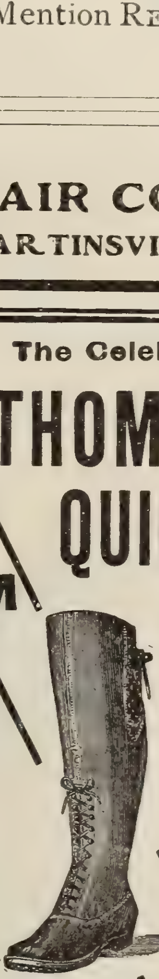

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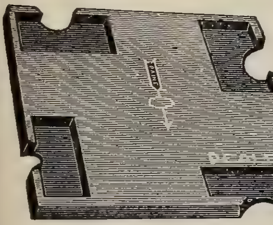

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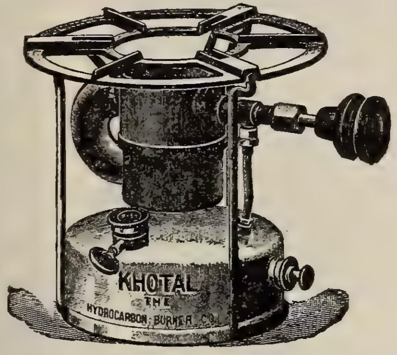

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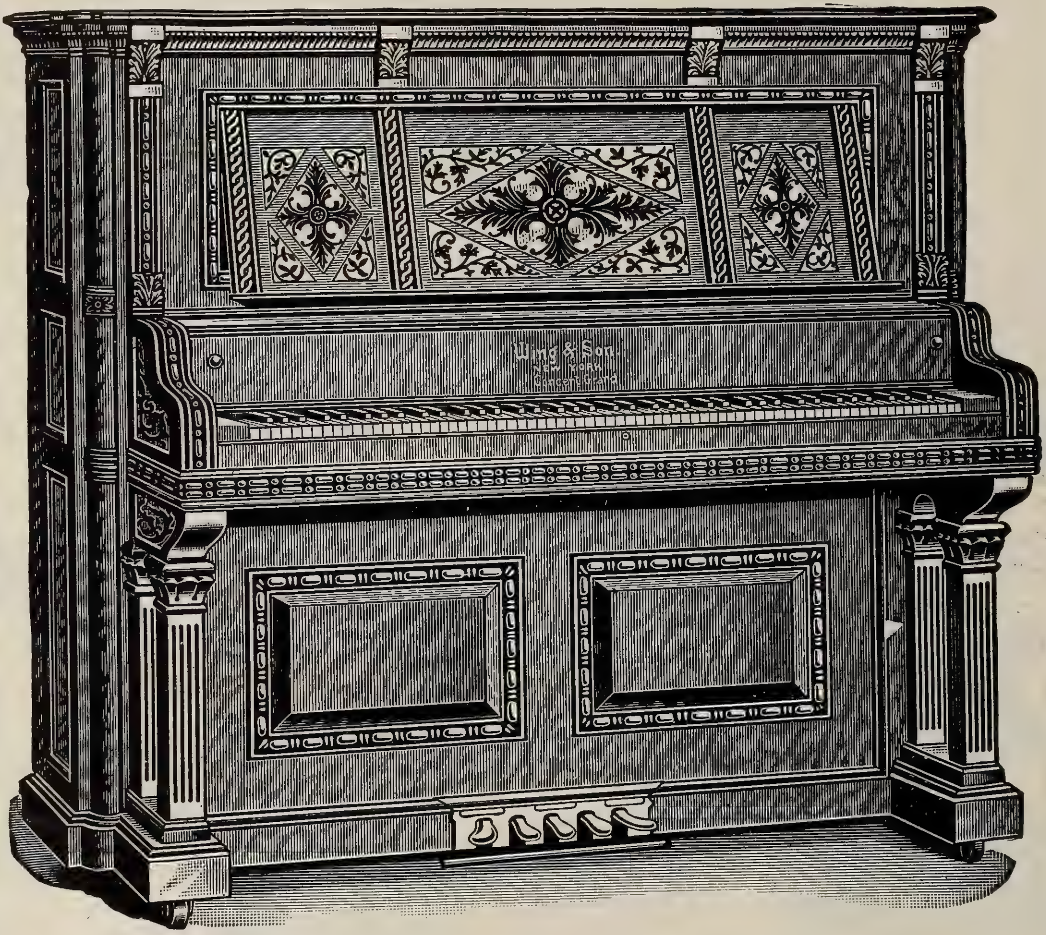

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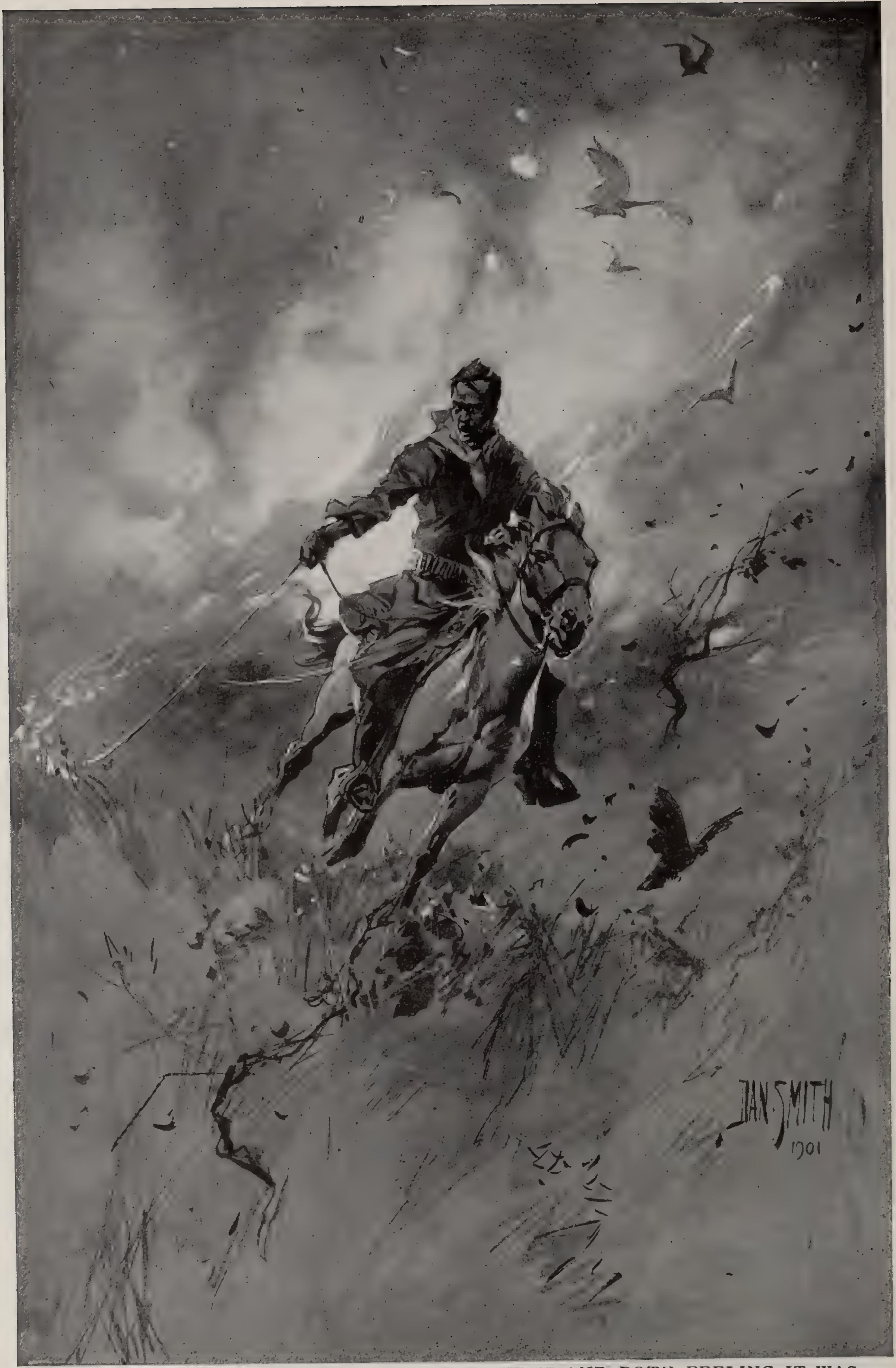
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RECREATION

Volume XVI. MARCH, 1902. Number 3.

G. O. SHIELDS (COQUINA), Editor and Manager

FIGHTING A PRAIRIE FIRE.

RAMSAY MACNAUGHTON.

Three nights of anxiety had told on the boys of the camp, and they slept fitfully, as hunting dogs sleep, with one eye open and mind alert. Indians of the turbulent Turtle mountain tribe had been for some time in ominous evidence. Ultimately they went on the warpath, and indulged in a little old time massacre of some of our scattered neighbors until relieved of their bloodthirst by the lead cure, administered by Canadian regulars. But it was not fear of Indians that ailed our camp. We were cow herders, good rifles were numerous and there were skilled hands to use them.

It was matches that were in earnest demand and more conscientiously carried than firearms. It had been a wonderful summer for grass. For 50 miles in all directions the herbage stood high, thick and dry, its vast expanse broken only by trails and more rarely by fire guards. The camp of 8 half underground shacks, with 5,000 cattle, extensive corrals and sheds, sundry horses and much else, was within one of those guards. Fires had been seen in the distance for a week, great mountains of smoke by day and a lurid horizon of flame by night. Responsive to every fickle flight of changing wind, danger sometimes approached us, sometimes fled away. Of 16 miles of fire guard, double plowed, with 100 feet of space between, 1-16 mile had been missed, and now, with the ground frozen like flint, nothing could be done to amend the oversight.

The grass, unlike that of the States, had not died and rotted, but stood perfectly cured and tinder-like; and not a flake of snow had fallen. For 3 days and nights a great head fire had threatened the little break in our guard; sleep was impossible and nervous prostration imminent. Fire once through the break, doomed the camp and imperiled life. There was no other natural or artificial guard within 40 miles. Attempts to locate the worst of the fires, raging on every side, were futile. Appearing near, they yet proved distant, the tract still unburnt being so vast.

The impromptu fire department had become well organized and trained, and was equipped with apparatus at once unique, laughable and effective. Everything with wheels was pressed into service and loaded with enough water barrels and fire mops to outfit a battalion. The mops were 10 feet long and shod with old shirts, trousers and other clothing. With them fire could be beaten out and kept from stacks and buildings. Near by were a number of green cow and horse hides, soaked for days in creek or puddle, with 2 long ropes on each by which they could be trailed from saddle; a contrivance as effective in its place as any city water tower or steamer.

On the last night only 2 men out of 20 were left in camp. Gangs armed with mops had gone to do what they could. Riders in pairs, with a soaked hide between them, had gone to find and run down side fires. On finding one they would drop the hide between them and, with ropes run out to their utmost extent, would ride briskly, one on each side of the thread of fire, wiping it out with the hide at the rate of 20 miles an hour. Usually they could follow the line to its end; at any rate, they could smother miles of what a change in wind could instantly convert into a madly rushing head fire.

The prairie is never level, but has a gentle and often a considerable roll. A great plain is as inscrutable and puzzling as are woods and mountains, as 2 of us realized that night.

We were left in camp while our fellows were riding in various directions. The dogs had grown sullen and the stock restless. Suddenly, at midnight, there was an uproar and an attempted stampede. A fiery furnace, seemingly heaven high and world wide, was making straight for camp. It might be 10 miles away, it might shift or die out; but it was our business to prevent it from reaching the camp, and we could afford to take no chance.

Our ponies stood saddled and picketed at the cabin door, and our last resort fire extinguishers were ready for use. Each of us had a stout rope coiled on saddle, one end looped on the horn, the other trailing and well frayed out. Two one gallon cans of kerosene and abundant matches completed the outfit.

If the danger was advancing, there was no choice but to start another head fire between it and the fire guard. It was not likely to jump the 2 plowings and the 100-foot burn between them. If it should, that would end the settlement.

The prairie proved no tableland as we rode straight toward the fire. We tore through the hollows, seeing and feeling nothing; but the rises brought us into smoke and glare, and the warm air rapidly grew hot. Suddenly, on the last rise, hell opened below us, and not a mile away. The sight shut out the world and showed an endless sea of fire. Driven by the wind, it was advancing 20 miles an hour. Our best gait was not over 12, with constant risk of broken legs from badger holes, and it was death to fall.

We turned back toward the fire guard with the roaring flame seemingly at our heels, and with us raced many wolves, some antelope and deer and any number of ground game. Within a few hundred yards of the guard we dipped the ends of our ropes in kerosene, lighted them, and started in opposite directions, each trailing our fiery serpent of hemp, and both feeling it was likely to be our last ride.

Each man succeeded in reaching opposite ends of the guard, but with only a few minutes in which to find and throw himself on a small burned-over spot. There, with face on the frozen ground, he was no longer in danger of roasting, though nigh to suffocation. Each pony, crouching, trembling and snorting, stuck instinctively to the few square rods of safe ground.

On roared the appalling sheet of flame. It had come 70 miles in a few hours. By some freak of wind or land formation, it narrowed to less than 4 miles in width before it reached the guard. Striking that simultaneously with its entire width, it went out like flashed powder, leaving the plain in darkness and our camp in safety.

"Hickory, dickory dock,
  The mouse ran up the clock"
    Of the stocking, and then
    He ran down again
When he found it was only a sock.

HUNTING THE BIGHORN IN BRITISH COLUMBIA.

STANLEY WASHBURN.

Away up in Northwestern Canada, over 100 miles from the boundaries of civilization, there is a region hemmed in by great mountain ranges of rugged rocks and snow-capped glaciers. Up to within a few years this country had never been penetrated by white men, and even now there are many valleys and inaccessible nooks and corners that no human eye has ever beheld. There mountain sheep dwell in great bands, undisturbed by the rifle of the hunter and the prying eye of the tourist. Yet this security, which has sheltered the timid sheep through numberless generations, is soon to pass forever before the invasion of civilization and the still more devastating advance of the lawless and butchering bands of Indians that flood the mountains every fall, slaughtering the game in every direction. But even the Indian, who, with his squaw, papooses and few ponies, penetrates well nigh every nook and cranny in the mountains, has not yet reached this country, with the exception of old Jimmie, who for years held the secret of the passes in this district.

In this vast region is a valley, within a radius of 10 miles of which 3 great rivers head—the Athabasca, pouring its waters into the Arctic ocean; the Saskatchewan, which flows into Hudson's bay, and the Brazean, tributary to the Saskatchewan.

This valley is about 7 miles in length, growing narrower and narrower toward its upper end. Great barren peaks rise sharply on both sides. At the head of this valley is a little basin, perhaps half a mile across. Nestled down amidst the rocks and mossy, stunted foliage that one finds above the timber line (for the altitude there is over 6,000 feet) are a few cold, clear pools where the mountain sheep love to drink and on whose shores they bask in the sun. A few hundred yards farther is a sharp turn, and we stand on a ledge falling away hundreds of feet. Around the base of this ledge foams a mountain stream, turning sharply down the valley, which stretches away at our feet. This is the valley of the headwaters of the Brazean, which has been entered by white men but twice. A few years ago a party pushed a short way down this stream, and last summer it was again explored for some 40 or 50 miles by an expedition, of which I was a member. Between the valleys of the Saskatchewan and the Brazean there is a pass, which has hitherto been supposed impassable, but which last summer was crossed for the first time with pack horses.

A VALLEY IN THE SHEEP HILLS.
150 miles North of Loggon, on the Canadian Pacific Railway.

In this defile one of the members of the party shot one of the finest specimens of mountain sheep I have ever seen. It was early in the fall, and the rams were moving a good deal alone, as could easily be seen from the frequent tracks of single animals in the soft ground about the pools and streams. About one o'clock the outfit crossed the head of the Brazean, and were wending their way along an old sheep trail, winding among the great boulders lodged on the side of the mountain. The 15 horses were strung out over a considerable distance, and the unevenness and roughness of ground made it most difficult for the pack animals to pick their way. At a bend in the trail, on a pile of loose rock and gravel not 100 yards away from the first pack horse, lay a great ram, asleep in the sun. In a moment we were all hurrying to the front, unloosening our rifles and filling our magazines as we ran. At the unusual sound the ram was on his feet with a bound. For a moment he stood, with his great horns silhouetted against the background of the mountain side, gazing at the pack train. He must have taken the horses for big game of some kind, else surely he would not have hesitated that fatal moment. Before he could turn, a soft nosed 30-40 Winchester bullet tore through his chest and out of his side. He was standing on the edge of a little dip, and he immediately disappeared from view. In a moment we saw him staggering painfully up the other side. Almost simultaneously 3 rifles cracked. The ram stopped, sank to his knees, and his great horned head rolled over on the ground.

A PATRIARCH.

He must have been a patriarch among the sheep, for his horns measured between 15 and 18 inches around the base and had a spread of 22 inches. The dimensions are uncertain as there was no rule in the party. His carcass weighed over 300 pounds, and made our heaviest pack animal stagger.

Farther down the valley the marks of the sheep were so thick that for hundreds of yards there was not a square foot that was not dotted with tracks.

Some 15 miles to the Northwest of this spot is a plateau at an elevation of 7,000 feet, with mountains rising an additional 4,000 feet. To the left is a razor-backed peak called Mount Wilcox. It rises some 3,000 or 4,000 feet above the plain on one side and on the other its barren slopes fall sharply away 8,000 or 10,000 feet into the headwaters of the Athabasca, which filter down from the toe of a great glacier.

On the sides of Mount Wilcox we counted at one time over 40 sheep. The position was inaccessible, but, by an arduous climb, we came on a bunch of the animals from above. As the party had been without fresh meat for weeks several sheep were shot. It was then about 8 in the evening, and by the time we had dressed our game it was nearly 10. We were 12 or 15 miles from our camp, and bivouaced in a little grove of pine trees just below the timber line. As we sat on the soft moss about our roaring camp fire, with the glaciers thundering in the mountains about us and the Northern lights tinging the snow caps with their silvery glow, we all agreed that there is no morsel more delicious to the tired hunter than Rocky mountain mutton roasted over a camp fire.

THE GLACIER OF THE BOW.
30 miles North of the Canadian Pacific Railway.

LAID OUT.

THROUGH COLORADO CANYONS.

DR. J. E. MILLER.

Becoming tired of office work earlier in the season than usual, a friend and I resolved to make a trip down the canyons of the Colorado.

From Glenwood Springs, on Grand river, to the Cascade canyon, is fully 300 miles. To cruise that distance in such a boat as we could build was no small undertaking. The craft we constructed was 17 feet long, flat bottomed, with a watertight compartment in each end. To protect us from the sun it had an awning extending from stem to stern. We carried plenty of pitch, white lead and other materials to repair possible damage.

We were so often warned of the dangers ahead that it was a relief to be at last fairly on our way. The first rough water was only a mile below the starting point. A few people had gathered there to see us take our first plunge. We were a little nervous as we approached the cataract, not knowing how staunch our boat would prove under her heavy load. However, she rode the swells like a duck, and we went our way with lighter hearts.

The first day, when nearing a fall, we landed and sized it up. That soon grew tiresome, so, unless there was an unusual roar ahead, we stayed in the boat and took things as they came. If that course did not contribute to our safety, it at least furnished plenty of excitement.

We ran late on the evening of the second day, hoping to reach a point from which we could telegraph to the anxious ones at home. Rounding a point we heard the loud snarl of angry water ahead. By standing on a thwart we could see the river rushing under a shelving rock on one side and dropping over a ledge on the other. Both looked ugly enough, but we decided to take the fall. So sitting well back and getting all possible speed on the boat, we let her go. She took the jump bravely, but stuck her nose so far under that the rollers easily completed her discomfiture, and she settled to the water's edge. We had taken the precaution of attaching long ropes to each end of the boat, and by means of them succeeded in pulling her ashore. We camped where we landed, building a big fire to dry our effects. On opening the watertight compartments we found all as dry as a bone. To guard against another ducking we nailed rubber cloth across the forward part of the boat.

The third day we went over exceedingly rough water in a box canyon, and a little farther on we encountered the worst rapid, that far, on the trip. The river dropped 25 feet in ¼ mile. The channel was so narrow that in places the boat could hardly pass. The rapid is a succession of curves and is everywhere studded with boulders. As we had been warned not to run that rapid we went ashore and took a look at it. First, there was a rough stretch of about 50 yards, then 100 yards of smooth water, and then the terror.

Not seeing any other way to get by, we decided to run it, all standing. A huge boulder rose 20 feet above the water in the center of the channel at the first rapid. That we grazed, and barely missed running down its twin a little below. On we rushed, wave after wave dashing over us. It seemed but a moment until it was over and we were drifting on smooth water.

Just below the rapids we passed a man fishing.

"Did yer come tru de falls?" he called.

"Yes," we said; "from Glenwood."

"Yer can't drown fools anyhow," he replied as we sped by.

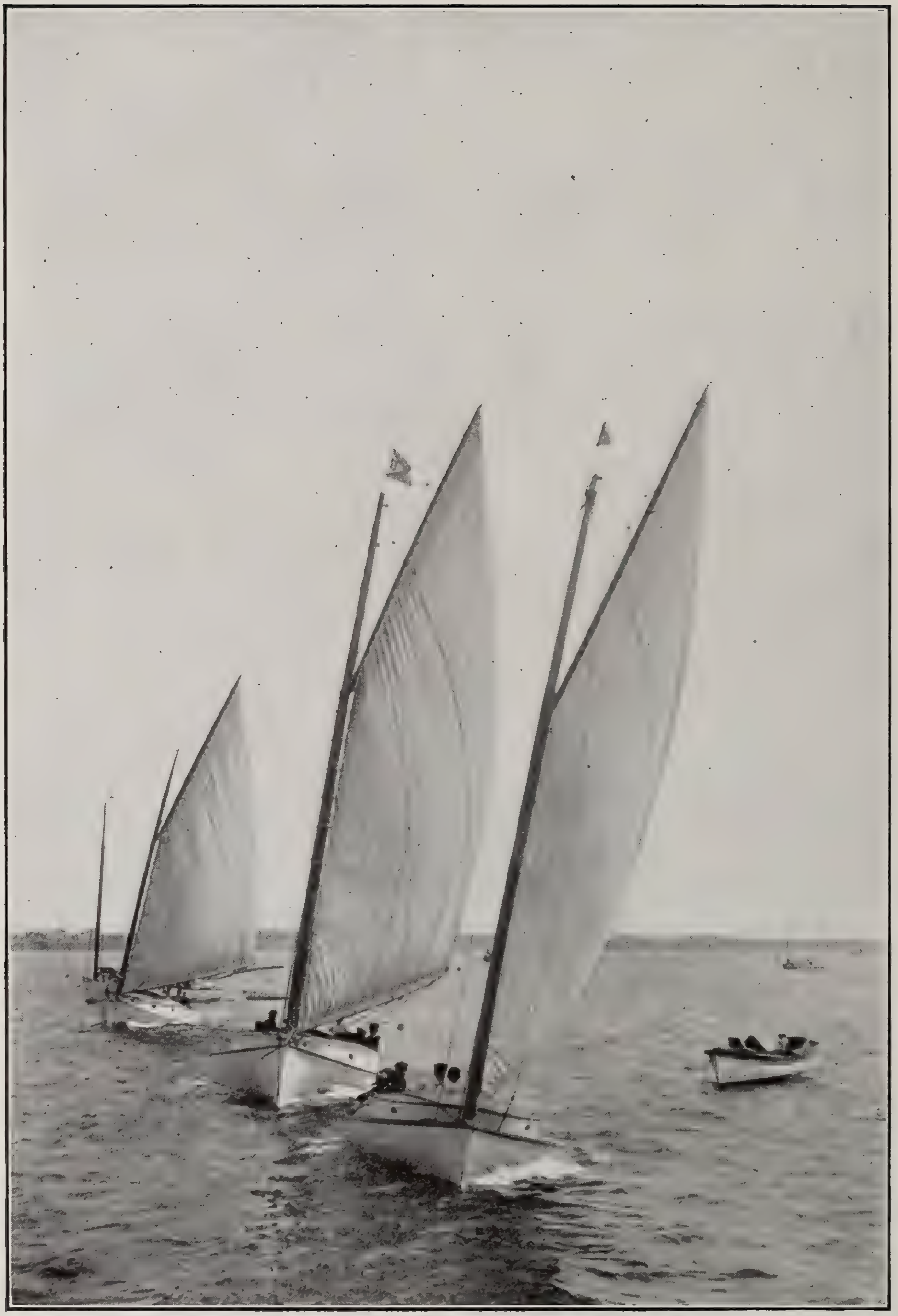
Next we passed through the fruit belt of Grand valley. If any tiller of that soil arraigns us for the theft of plums and peaches we shall have to plead guilty.

At Little Creek valley, 15 miles above Moab, we saw picturesque rocks, where it required no great stretch of the imagination to behold beautiful castles, spires and domes, and gigantic figures of men and animals. Farther down the river was a red sandstone spire, hundreds of feet high. On its top was balanced a perfect sphere of sandstone. The grandeur of those canyons is indescribable.

Moab is a quaint Mormon town in a beautiful valley. There are the ruins of a structure built by the cliff dwellers. We spent a day looking for relics, with little success.

After a week's stay at Moab we continued our journey. We left our boat at the first cataract and walked down as far as we could in one day, slept on the sand that night, and returned to the boat the following day. We took a few pictures and then began the return, on which we saw the grandest scenic effect of the trip. We were caught in a severe rain. During and after the storm countless waterfalls poured down the sides of the canyon; not little trickling streams, but mad rushes of water, all taking color from the rocks over which they passed.

Of hunting we had none; there is no game in the canyon. The scenic wonders of the river alone make the trip worth taking.



AMATEUR PHOTO BY D. W. FLINT.

IN FULL SAIL.
Winner of 2d Prize in RECREATION's 6th Annual Photo Competition.

WITH THE LEAPING OUANANICHE.

J. L. MOTT, 3D.

A finer, more gamy fish than the ouananiche does not exist. All hail to him and to his fighting courage. Last summer I spent nearly 3 months on Grand lake, in Maine, and during that time my wife and I enjoyed many days' sport on the stream. One day especially comes back to me and brings delightful memories.

It was the 29th of August. We had come down with our guides from up the lake to try the fly on the stream. My wife and her guide went about half way down to the falls, while Joe and I started in by the old tannery. It was an ideal day; not too bright, yet not absolutely dark, so I put on a single dusty miller and cast into the pool. A swirl, a gleam of a bright something in the water and the reel commenced its merry little song. Up and down, backward and forward, in and out of water rushed my prize. Oh ye who are lovers of the fly, of the waters, of the woods! What grander feeling is there than when the rod bends hard, the vibrations of the fish reach your very heart and you think him a 5-pounder sure!

AMATEUR PHOTO BY LAURENCE MOTT.

RATIONAL TOGS FOR A WOMAN ANGLER.

Sixteen minutes brought the beauty to the net, and he weighed 4¼ pounds. Three more of the same rewarded my best efforts on that pool, and we dropped down to where my wife was having a glorious battle with 2 fish.

For fishing any kind of salmon I use only one fly. Possibly it may be that having become used to doing so on the Restigouche I can not change; but the fact remains. I am not really happy unless but one fly graces the leader. My wife, however, prefers 2. I fear it is because she can get 2 at once. That time she succeeded.

With the angler's usual freedom I offered all sorts of advice and coaching, all of which were rejected with scorn; and, indeed, I never saw prettier handling of fish. They gave up the ghost in 12 minutes. One weighed 3½ pounds and the other 2¾.

From there we went on down to the head of the falls, and leaving our canoes proceeded on foot across the ledges to the Rocky pool. A magnificent bit of water it is, too. The fall into it is about 4 feet, and the depth is 12 or 14 feet, making it an ideal place for fish to lie. Madam cast close under the falling water. Heavens, what was that! The cavernous mouth, large head and heavy shoulders of a sea salmon rolled lazily out of the foam, and missed the fly. Patiently and for hours we cast and cast and cast again, with every sort of a permissible lure, but all in vain. Our hearts were nearly broken and we did not feel entirely ourselves again until the incident was forgotten in the excitement caused by the fierceness and rapidity with which the fish were rising all along the pool. It was a continuous splash; whirr-r-r-r-r all the time.

As we tired the fish out the boys carefully netted and weighed them in the net, the weight of the latter being subtracted; after which the fish were gently slipped back, unharmed but tired, into their native element.

So it was all day, until our arms ached and our reel fingers were so tired we could scarcely move them. The summing up of the day showed these results: 48 salmon, averaging 3½ pounds apiece. Four of them we kept for eating purposes; 44 are still waiting for someone's fly.

Of course we carried a camera, as every fishing or hunting party should. We got some fine pictures, best and most valued of which was of a timid doe that came out of the woods and tarried just a moment in the open while we were resting. I made a telling shot and it is a great satisfaction to know it did not hurt her. She still lives and I hope some other camera hunter may get as easy a shot of her as I got.

Joe and Charlie Sprague were our

AMATEUR PHOTO BY LAURENCE MOTT.

THE RESULT OF A PAINLESS SHOT.

guides. The latter is probably known to some of the readers of this article as "Bungie" and "Kid." Two better guides I have never had in my service, though in my hunting and fishing trips of the last 8 years, I have had many. Always obliging, anticipating one's slightest wish, hard workers and clever at it, too, with a thorough knowledge of how and where to fish or shoot, I recommend these men as being all that can be desired.

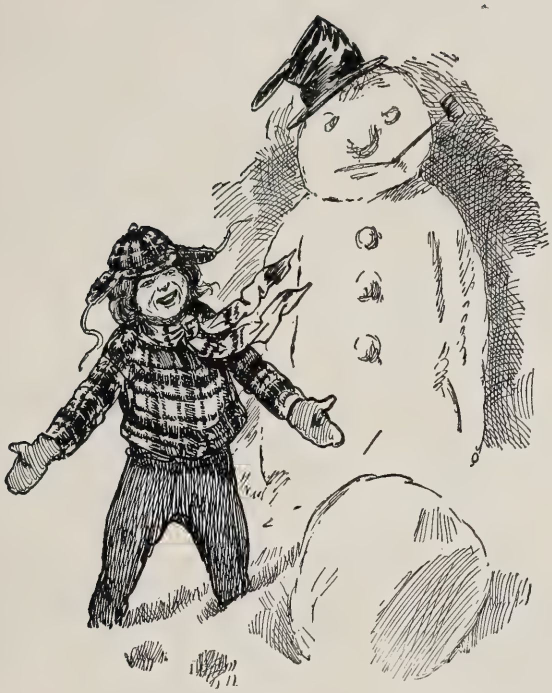
While fishing we stayed at Frank Ball's. He is an ideal host and his wife is a capital sportswoman. Their wish is to please, and they do it thoroughly, leaving nothing to be desired.

AMATEUR PHOTO BY MRS. E. E. LAWRENCE.

WILD GOOSE ON NEST.
Winner of 11th Prize in RECREATION's 6th Annual Photo Competition.
Made on Lovell Plate.

THAT BOY.

LEWIS A. BROWNE.

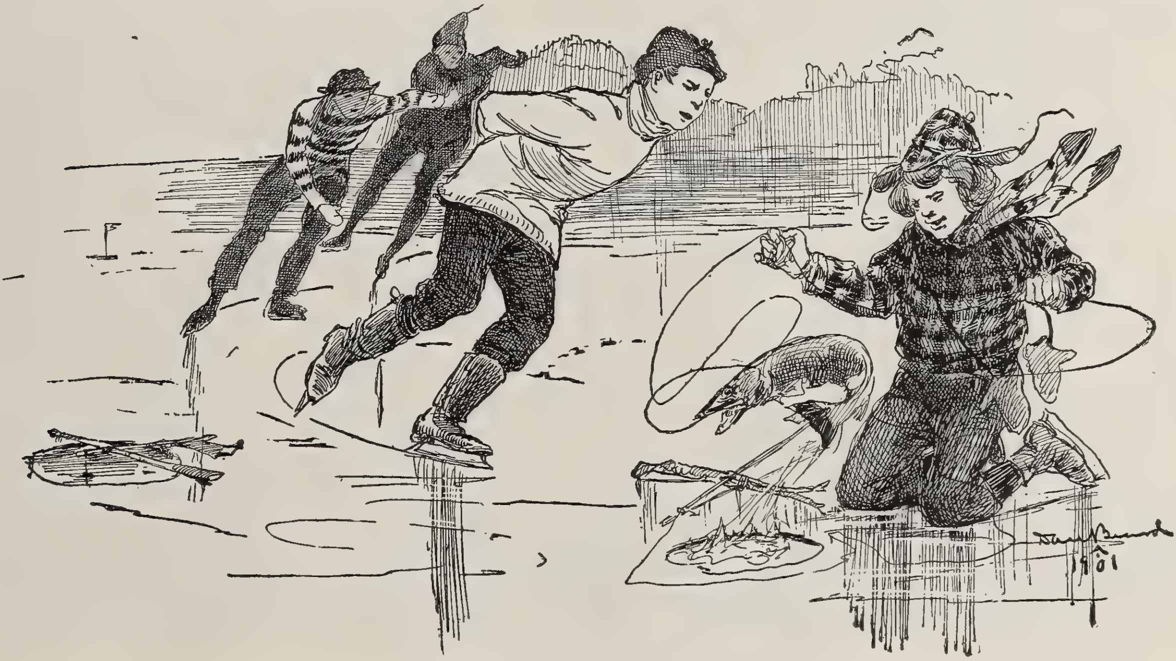


"It's funny 'bout that boy o' mine;
Jest watch him there at play,
A-buildin' up a snow man fine
An' luggin' it that way.
He's in it up above his knees,
He says it does him good;
(He also says he's sure to freeze
A-splittin' up my wood!)

"He went a-fishin' t'other day;
The wind was cold an' strong;
He didn't mind it anyway,
Jest bobbed the whole day long.
Caught 7 pick'rel, big uns, too,
An' they looked mighty nice;
(He said he'd freeze that day, he knew,
A-helpin' me cut ice!)

"He likes to snowball with the boys,
An' he can slide all night;
He says sich things is 'winter joys,'
An' makes him feel jest right.
He's visitin' his traps to-day,
Back 6 mile in the woods;
(Too cold to go a mile to town
To buy some household goods!)

"It does seem kinder funny, now,
How he is put together;
Can't work a bit, an' yet, I vow!
Can play in any weather.
He's mine an' I won't make a fuss,
But 't makes me all unstrung;
(Well there, I guess he's 'bout like us
When we were jest as young!)"



"BIG UNS, TOO"

AMATEUR PHOTO BY D. G. TOLLES.

IN THE RUSH OF WATERS.

Winner of 13th Prize in RECREATION's 6th Annual Photo Competition.

JERRY POLAND AND THE GRIZZLY.

REV. FRANCIS HOPE.

This is a true story of early days in California, and this is how Jerry tells it:

"In '50 I went to Cachville, in El Dorado county, prospectin'; and strikin' payin' dirt decided to stay a bit. Others come and purty soon we had quite a settlement and even a preacher. Then the folks built a little sort of a church. One Sunday mornin' 6 of us men and one woman—for women was mighty scarce round minin' camps in them days—was at church. The preacher had got well into his sermon, roarin' and tearin' in the Methody style, when up comes a feller and pokes his head in the door and says, 'There's a b'ar.' Sech a scatterin' you never seen. In 2 seconds there warn't a man left 'cept the woman and the parson, but he kept right on exhortin' wus than ever. It did seem kinder mean to leave like that, but when them other chaps cleared out I had to make a break too; and it warn't every day a b'ar come around on Sundays. So I jest wiggled out in the purlitest way I could.

"By the time I got to my shanty and got my shootin' iron the rest was goin' over the hill on the dead run. I followed them, and the last thing I heard was the preacher layin' down the law and the prophets, tryin' to get that woman saved anyhow.

"As the other fellers had the start of me I took it purty easy down the trail till I come to the mouth of a deep canyon full of thick brush and mansanita bushes and rocks. I went in, and the furder I went the less I liked it. While I stood deliberatin' whether I'd better go on or quit, suddenly there was a rush just above me, and with a bawl you could have heard 5 miles off, old Ephraim was on me. I hadn't time to do nothin'. He came with his mouth open and his ears clapped down tight agin' his head. Jest as he lit on me I managed to grab them ears and down I went, with him atop of me. What with the hillside bein' steep and him a-comin' so fast, the old feller went clear over me. As he was goin' I put my feet to his belly and give him a h'ist that was a considerable help to him, and as I was a holdin' his ears at the same time he turned a clean somersault and landed on his back below me. He was the most surprised b'ar you ever seen; didn't know what struck him. 'Peared to think somebody had hit him with a sandbag and he was bound to find out who it was. He ups and looks this way and then that, in a stupid sort of fashion. I laid low and said nothin' but you bet I did a power of thinkin'. Finally he comes up the hill a bit, sniffs the air, shakes his head once or twice and trots off; and mighty glad I was to get back again in time to help the parson out with the doxology."

THE GOOD CHAP.

THEODORE ROBERTS.

I met a chap in the woods one day
With a gun, a pack an' a bearded chin,
An' hands that was hard, an' a "well-met" way,
An' a guide who smelt of rawhide an' gin.

We shared our bread an' pork an' tea;
He smoked my 'baccy, I sang a song.
I was lookin' for spars, an' he
Was stalking whatever might come along.

I come to Noo York to work. One day
I met a gent with a shaven chin.
He hadn't no guide, but he knew his way,
An' he knew me too, an' he says, "Come in."

The waiters stared, but I didn't care;
An' I et his oysters an' drunk his wine.
Oh, he is a choke-bore sport for fair,
An' he writes wolf stories—a scad a line!

He's shot in the West, an' South an' East.
He's taken his liquor in every clime.
By jinks, I'll buy his books some day
An' read 'em, too, if I get the time.

AMATEUR PHOTO BY EVAN LEWIS.

WILLOW PTARMIGAN ON NEST
Winner of 7th Prize in RECREATION'S 6th Annual Photo Competition
(See page 246.)

AMATEUR PHOTO BY R. H. BEEBE.

ALL IN A ROW.
Winner of 6th Prize in RECREATION'S 6th Annual Photo Competition.

THE MASTER AND TENNY.

J. L. TOOKER, JR.

It was a warm October afternoon. The local sportsmen had unbuttoned their vests and, deserting the Hotel Central's reading room, had sought the porch. There they tilted their chairs back at a comfortable angle and discussed the game laws and the outlook for the coming open season.

The sparrows were making an unusual commotion overhead, flitting from lintel to lintel. Their wild cries of alarm interrupted conversation until a sudden flash of gray through the scanty but gaudy leaves of a maple, and a cry of pain, told of a hawk's successful strike for a midday titbit. At that moment the landlord emerged from the reading room, an open letter in one hand and a chair in the other.

"I've got a letter from Bill," he said, putting down the chair and seating himself. He zigzagged the back legs forward by quick jerks until he had gained the desired angle and continued,

"He says Tenny is the most knowing pointer he ever broke, and that I can lay odds on him against any dog in the county. We must arrange a date for Ernston and give Tenny a trial with those birds that have been so carefully educated in shot dodging."

It was then and there settled that the second day of the season, the first day falling on Sunday, should see Tenny's trial.

The district mentioned by the Master of Tenny had been the rooting ground of game hogs, and their beastly work had been thorough. Yet it was known that 5 or 6 small coveys could be found within a radius of 6 miles of Ernston station. Those birds were credited with wonderful acumen, and it was generally believed that if their bodies could be examined many shot marks would be found thereon. They were the survivors of many raids by pot hunters, and it was a valuable dog that could go up successfully against such veteran birds.

Tenny had become the Master's idol when about 4 months old, and after running about the hotel a while, had been sent away for a course of training. When he was graduated with the diploma embodied in the letter from Bill he was a yearling. Though the Master could not point with pride to any particular sire or dam in Tenny's line of ancestry, he was sure the dog would prove a good one if only because a good sum had been expended for his education.

Tenny was fairly good looking, sleek of limb and body, snow white, with a pretty brown patch over each eye, and a small brown square at the root of his long, whippy tail. His head was a trifle too stubby, but had one of the party present at the time of Tenny's arrival home given breath to such suspicion he would not have been invited to the bar when the Master celebrated the event.

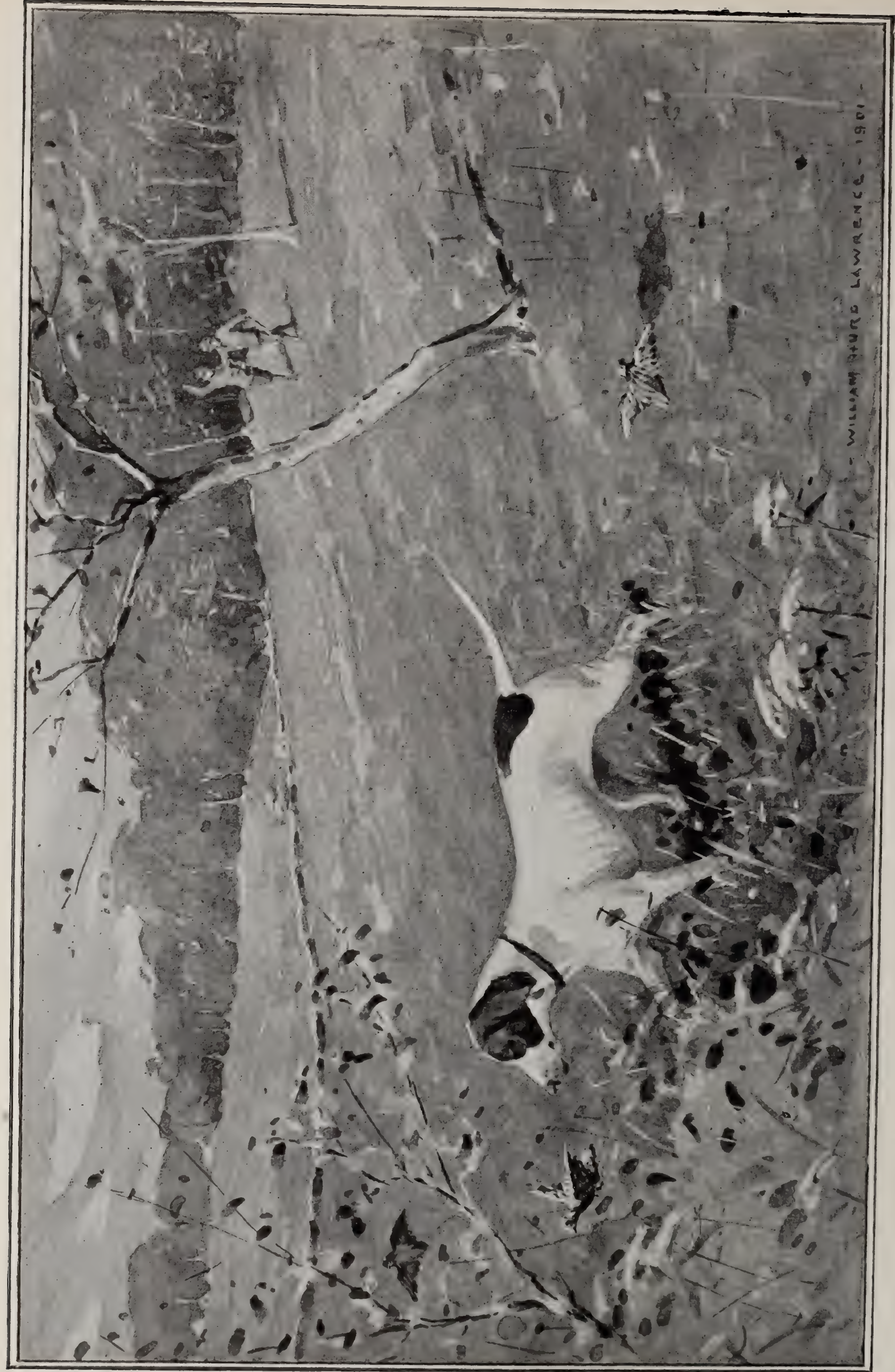
Time rolled by quickly until the open season was at hand. Of all who promised to witness Tenny's *debut,* only the Master and one whom I shall call Jim were on to see the result. Those 2, with Tenny, took the field one November morning. Guns were soon removed from their cases, and the trio went forth in all the glory of the new born day.

Hardly had they started when a most exhilarating spectacle came in view. Not 60 yards away a covey of quails emerged from the scrub oak and, crossing the road, entered the stubble to the left. Tenny nosed the tracks with a knowing look, and, crawling beneath the fence, started down the trail with head swinging as though hung on a pivot. His followers had barely mounted the fence when a whirr of wings gave notice of flight. From the center of the field tiny brown bodies arose and sped far away to the Southwest.

Tenny continued down the scent, merely glancing at the birds as they rose, circled their farthest advance, and started back over the field. His ranging qualities were immense. When he answered the Master's urgent calls all the sparrows and other small birds had been forced to seek pastures new.

Down the slope went the trio into the valley where the baby birches shot their pipestem trunks up to the sunlight. Then ascending the hill, they seated themselves on a fallen pine for a short rest. A chipmunk perched on a neighboring stump gave evidence, by the desultory fall of the cuttings, of his interest in the pantomime.

"I have often been amazed by a quail's long flight," said the Master, "but that last aerial display beats all ——. See that beautiful little creature?" As the Master pointed in the direction of the stump Tenny caught a glimpse of the mite of a squirrel, made a dash, stopped, and looked askance at the magical disappearance of the little beast. A slight noise attracted his attention in another direction. Away he bounded, regardless of the Master's


WILLIAM HURD LAWRENCE - 1901

HE DASHED STRAIGHT INTO THE COVEY.

summons, and the crackling of the newly fallen leaves told of a chase.

"Rabbit?" was the Master's query.

"Guess so," responded Jim.

Then they took up their guns and trudged on toward Otts' field, a mile distant, where the Master believed quails of a quieter disposition could be found.

When Tenny returned from the chase he headed the procession, and little birds that culled seeds from wayside weeds took flight and were scattered to the 4 winds.

The field was entered at the lower end, where the soil had been tilled for corn. A flock of crows were seeking stray kernels. They flapped idly to neighboring trees and did sentinel duty, calling "Caw, caw, caw," until the danger passed.

Ranging through the rye stubble in the upper field, Tenny suddenly wheeled about, hesitated and gave signs that sent a thrill through the Master's veins. Tenny heeded not warning calls, but sped along the scent as fast as his nose would guide and his legs carry him. A good 100 yards away he dashed straight into the covey, scattering the birds to all points of the compass and nearly catching one with his teeth as it left the ground beneath his nose.

A voice from the hedge was wafted across the field in the clear morning air,

"Give that cur a charge of shot!"

"I recognize your ear marks," shouted the Master; "your cowardly advice implies loss of a ground shot."

They walked to the hedge and passed the wooded slope. There the Master said,

"I would tie Tenny to one of these trees if it was possible to return this way."

Tenny was then proving his bird finding ability by causing a distant whirr of wings. The 2 and the dog emerged from the woods and descended into an open. A small brook coursed through the green, and beside it they seated themselves on a mossy mound and quenched their thirst. Great bunches of catbrier were scattered here and there, and luxuriant grass carpeted the aisles formed by the patches of thorns.

Tenny, satisfied with his chase, came gamboling down the brook and, dropping on the knoll, nested his head on the Master's knees. The Master said,

"I love dogs; all are as the Creator made them. I would as quickly feed a mongrel as a thoroughbred. When an animal falters or fails I hold it is the fault of its trainer, and I am satisfied to settle the matter with the man at the first opportunity"

A screech owl, perched on a low pine branch, with a half devoured field mouse in his claws, blinked and twisted his neck as he watched the trio disappear down the course of the brook. They crossed a bog by stepping on the thick masses of ferns and grass that formed about the roots of spice bushes, and gained a field in which stood a deserted house. Then their footsteps led them to a caved-in cistern, from which they rescued a nearly famished hare.

Tenny was called and tied to a fence post, and what was left of bunny was taken to a place of safety. A look from its great brown eyes repaid the men for their trouble. Going thence, with the discontented Tenny at the end of a cord, they went along the road toward the West. A clay bank marks the place where the dog was given his freedom. Beyond the bank they entered the scrub oaks at their left, the Master several yards in the rear. There was a sudden whirr of wings, and in an instant Jim dropped flat on the ground. He had looked straight down the barrels of the Master's gun and imagined he saw the cardboard wads growing larger and larger. But he was mistaken. The Master had taken no chances. Tenny, coming down wind, had run the birds between the hunters.

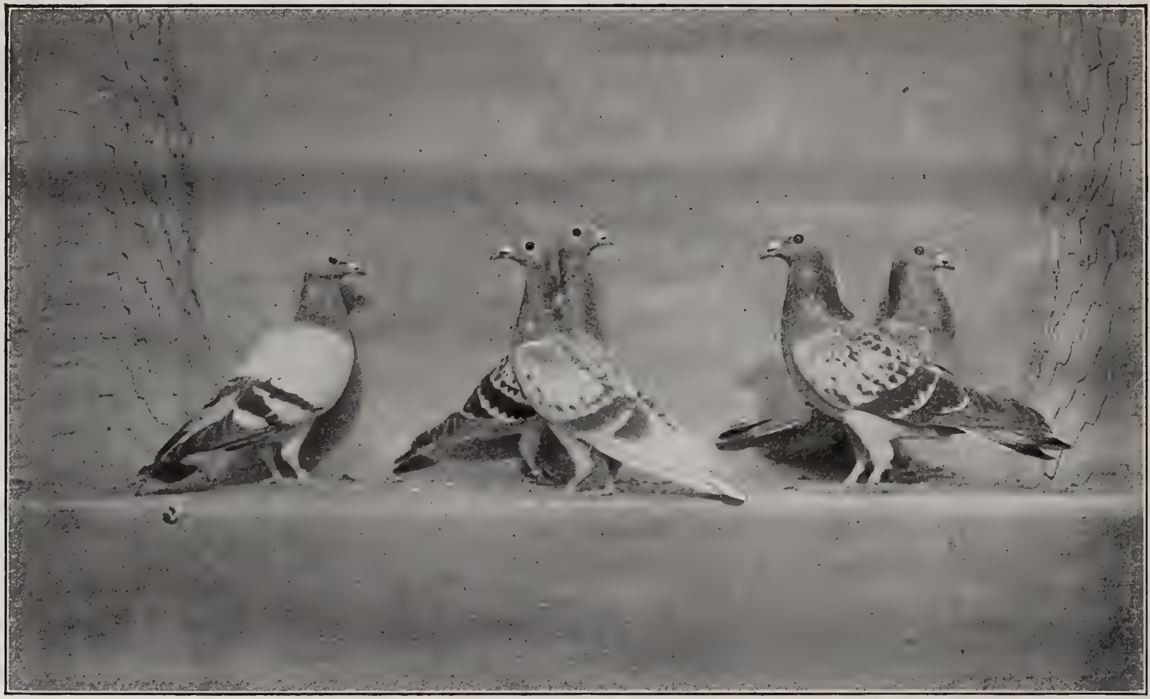
Cautiously they watched for the scattered birds, but in vain; they had taken refuge in an impenetrable swamp. An irregular circle of pines that towered high above the dwarf oaks attracted the attention of the hunters. There they found a level plot of ground carpeted with dry pine needles. Guns were set down against one of the pines, and, spreading napkins, the men sat themselves down and appeased their hunger, not forgetting to give Tenny his share.

Pipes were lighted and the fragrant gray smoke was curling upward when Tenny suddenly sprang to his feet and away sailed a grouse that had walked into the opening.

"I believe that fellow would have come and picked up these crumbs," said the Master, as he folded away the napkins in the empty game bag.

Then they worked their way out of the woods to the road and turned toward the station. Although no flannel had passed through the gun barrels they were as glossy as when removed from their cases. Yet the walk through the woods had been a health giving exercise, and the hunters went homeward with a healthy, ruddy glow on their faces.

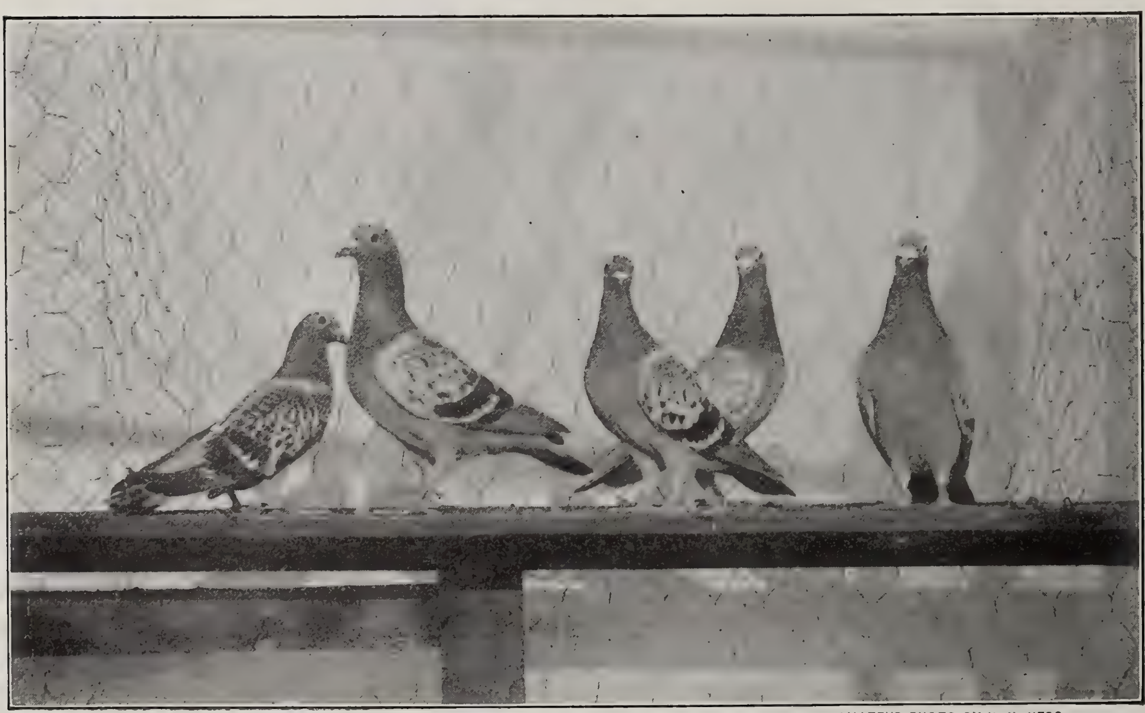
Tenny, a few years later, went on a hunting trip to Virginia; but it is believed that some other dog roamed the home woods with the Master and his gun.



AMATEUR PHOTO BY H H. HESS

HOMERS.

Winner of 9th Prize in RECREATION'S 6th Annual Photo Competition.



AMATEUR PHOTO BY H. H. HESS.

ANOTHER GROUP OF HOMERS.

Young Athlete—I have muscles to beat the band!

His Wife—Then you must have muscles to beat the rugs, also.—Chicago News.

QUIZ; A KANGAROO RAT.

H. A. THOMPSON.

"Quiz has been at it again!"

Jack was speaking. His tone expressed volumes. Quiz was a kangaroo rat which had made its home in the chinks of rock behind our cupboard. The "it" which he was "at again" was indiscriminate, wanton and often destructive theft of our belongings. This time the portion of our possessions which had attracted the long-fingered rodent was a box of quills of gold dust. The quills, containing the product of several weeks' labor on a placer claim in the vicinity, had been placed by Jack in a cigar box on a shelf in our cupboard.

Jack was engaged in mining; I in convalescing, assisted by the pure air and delightful weather of an Arizona autumn, from a severe attack of typhoid. The men of pills and bottles had shipped me to the foothills to camp with Jack and sundry tonics. Our tent was pitched where a low sandstone butte changed the course of a dry, sandy arroyo. A perpendicular wall of rock, at this angle, had been honeycombed by the flood-season torrents into a series of cavites of verying sizes. In these niches we had deposited our food supplies, utensils and lighter camp equipage, tor we had discovered that the ants kept away from this rock. Why was a mystery.

But immunity from invasion by ants caused us to enter, unwittingly, the domain of an even more dangerous enemy. He stole our sugar, scattering what he could not eat. He tore open sacks of dried fruit, beans and flour, and distributed the *debris* about the recesses in the wall. Edibles encased in wood were insecure; that rat could gnaw through an ordinary box in a short time. On one of Jack's trips to the nearest settlement he obtained a number of cans with screw tops. These shut out our tormentor from such groceries as could be placed within metal walls, but those not so protected were still stolen. The little scamp turned his attention to toilet articles, carrying off toothbrushes and combs, chewing the bristles of hair brushes, etc. The absorbing question of camp became, "What will he do next?" From this constant presentation of a difficult problem we called him Quiz.

The climax was reached when Jack discovered a hole in the cigar box and certified the absence of several pennyweights of gold. It was then he made the remark which begins this history, and other remarks, recorded, I fear, more permanently. A crevice at the back of one of the niches was defended with the usual pile of cholla cactus balls. My partner poked a stick down this crack and got his hand full of barbed spines for his pains. Then he made more remarks.

"I don't see what in ——— that rascal wanted with gold!" he growled, pulling the stinging needles out of the injured hand. "He can't eat it. I wish he could; it would probably kill him. I wonder where he has taken those quills?"

"Probably where he took those spoons, your scarfpin, and my toothbrush," I replied. "The only way you can get at the hiding place of the miscreant is by blowing up the whole cliff, with the chances in favor of blowing up the gold, too."

THERE WAS A HOLE THROUGH OUR BEST CAMP KETTLE.

"Well," remarked Jack, decisively, "Quiz must die. I work all day, while you loaf and read, so you can stay here and shoot him if he shows his thieving head out of the rocks."

At first thought it would seem easy to carry out these instructions, since there were several 6-shooters and a shot gun in camp; but Quiz seldom showed himself, and a scatter gun would play havoc with our camp utensils. Besides, I had lingering remnants of sportsmanship and scorned to lift a shot gun against so small an animal. I put a camp stool in a shaded place, laid my .44 caliber Colt within reach, and sat down to wait for the rat. Along in the afternoon I heard a slight scratching sound. Quiz was gnawing at the candle box. Picking up the revolver I shot. I can score a fair target average when in good health, but the fever had left my nerves in woeful condition, and the pistol sight wobbled as if I were trying to hit some spot on a rapidly moving wheel. When the flash finally came Quiz jumped to the floor unhurt. There was a hole, however, through the bottom of our best granite camp kettle, and I could almost take oath that the rat lifted a stubby thumb to his sharp nose and wagged his fingers before he darted to his home. What I said was not classical.

My comrade, who had heard the shot, was so interested in the fate of the rat that he ran 200 yards to inquire into the accuracy of my aim.

"You would better shoot for the camp kettle next time," he remarked, derisively, "and perhaps you would hit the rat."

"I should probably perforate the rest of the kitchen utensils," I replied, humbly.

"Well," he added, "I shall go to the village to-morrow for some giant powder, and I'll get a mouse trap, too. That may prove a better investment than ammunition."

I spent the next day keeping a sharp lookout for Quiz, who danced in and out of the cavities with tantalizing frequency and a rapidity which enabled him to defy me in the most brazen manner. Several times I fired at him with no other effect than to smash a bottle of headlight oil, which fed the bicycle lamp by which I read at night. That rat literally played hide-and-seek with me all day. He would sit on a stone out in the open, flirt his brush of a tail until I leveled the revolver, and then dart away with a grin on his face. It was maddening, especially to one who realized that his right hand had temporarily lost its cunning, and that he could not hit a covey of barns. It required an effort of will to avoid resorting to the shot gun. I believe, had the annoyance continued a week longer, I should have had a relapse, brought on by pure nervous irritation. That night Jack returned with his purchases.

"I brought No. 1 powder," he remarked, laying down a box of the dynamite sticks. "It contains 60 per cent. nitro-glycerine. That ledge is a tough conglomerate and needs considerable nitro to tear it. By the way, that No. 1 may explode from a severe blow, so we would better put it in a safe place. I brought a mouse trap, too," continued Jack, displaying the article.

He deposited the giant powder in one of the niches of the cupboard and laid the fuse and percussion caps near. The caps were large ones, loaded heavily with fulminate of mercury, and required gentle handling. The detonation of one in the hand would cause the loss of a finger or 2.

The next morning there were abundant evidences of the depredations of Quiz. He had gnawed into the box of candles, torn open a sack of *frijoles,* and ruined a vest which Jack had left in the cupboard; but the trap was untouched.

"Confound Quiz!" ejaculated my partner, gazing sadly at the riddled vest. "I'll put a bullet in him if the chance offers."

I doubted neither Jack's ability nor his will, but the rat seemed to divine that a crack shot was after him, and kept out of sight. The thefts, however, went on regularly.

On the evening of the second day, as we were seated at supper, Jack suddenly drew the big .45 caliber gun from its holster at his side and took careful aim into one of the niches. Following the direction of the weapon I saw Quiz perked up on his hind legs and biting away at something he held between his paws. I also saw at the same instant that the cavity he occupied was the one which sheltered that box of dynamite, and that the rat was immediately in front of the tin of percussion caps.

"Don't shoot! Stop! For the sake of Heav—!" I yelled, the last of the sentence being lost in a crashing report. Slivers of rock, fragments of camp stuff and pieces of sputtering fuse flew all about us and a cloud of smoke hid the niche. Jack's arm dropped nervelessly and his face, usually the healthy red of Arizona sunburn, blanched white. Slowly we looked each other over to make sure that no portion of the anatomy of either was missing; then my comrade drawled, "It is said Providence watches over intoxicated men and fools. I am sober, so you can draw your own conclusions."

Still trembling, we walked to the wall and examined the niche. There was nothing in it save the box of dynamite, which had been moved against one side of the cavity, and a few patches of furry skin plastered on the rock. The bullet had hit the box of caps and exploded them.

"If that giant powder had gone off," said Jack, slowly, "and I don't see why it didn't, unless the wood casing and the sawdust packing saved it, we would still be traveling in the direction in which Glory is supposed to lie."

BEARS THAT CLIMB.

T. B. CRAPO.

I have seen 2 bears climb trees after having been shot, which I have never heard another hunter tell of.

In the spring of '94 I was staying on Rattlesnake ranch. It was beautiful and warm. One day, when the other men were all gone and I had tired of loafing around, I decided to go out and kill a bear.

It was not far to the canyon, and I soon reached the head of Skidway hollow. Circling the hill on the Western side of the canyon, crossing several coolies and finally abandoning hope, I was well on my way down the canyon again, homeward bound, and going like a scared steamboat, when I came out suddenly within 40 yards of a bear, feeding on the hillside.

I stopped as if I'd been kicked, leveled my 40-82 on his ribs, and let go. He wheeled like a weathercock in a blow, and bawled like a dying calf, then shot up a tree. He climbed 10 feet, then hung. I fired again, and he fell.

I had killed a bear. Too impatient to stay to skin him, I only disemboweled him, and, leaving him on a snow bank, hurried on to tell the boys.

My victim was only a yearling black, all head and legs; but he was a bear, and would do to show, and I was as proud as a peacock. As I trudged back to the ranch I carried on all sorts of conversation with the boys, and fancied all sorts of airs of superiority, planned an indifferent manner, as though killing a bear was a mere ordinary occurrence.

Five hundred yards nearer home I came on another, on the opposite slope, coming toward me. He was perhaps 500 yards distant, and didn't see me. Hiding behind a jack pine, I waited for him, wondering if he could hear my heart thumps at that distance. He looked as big as a cow. However, it was only a black bear, and I wasn't afraid of any black bear! Not I! At 250 paces he turned to enter an aspen thicket. I hallooed to attract his attention, expecting him to stop at call long enough for me to shoot. I must have yelled loud enough to be heard in South Africa, for the yawp came back, intensified and magnified, repeated again and again, from every cliff and crag, from every rock and hill in the Rocky mountains, dying away in distant thunders.

The bear stopped at this surprising concert, and I improved the opportunity to put in a shot. Again the echoes thundered as if a dozen Gatlings were working. At the report, Ephraim jumped straight into the air, drawing his feet up against his body, and letting out a yell to beat a Comanche. He lit running, and I shot on and on, till my magazine was exhausted. I shot him in the foot and in the pants.

Hurrying forward, I intercepted him as he turned a rocky point, and put a shot into his shoulder. He sprang into a tree and out on a limb 10 feet high. There I put another bullet into the other shoulder and he came down—dead.

The boys would not believe my story when I got home, but next morning I proved it by getting them to help me skin. We tried some steaks, but I could not eat them.

Lady—What is the matter with my husband?

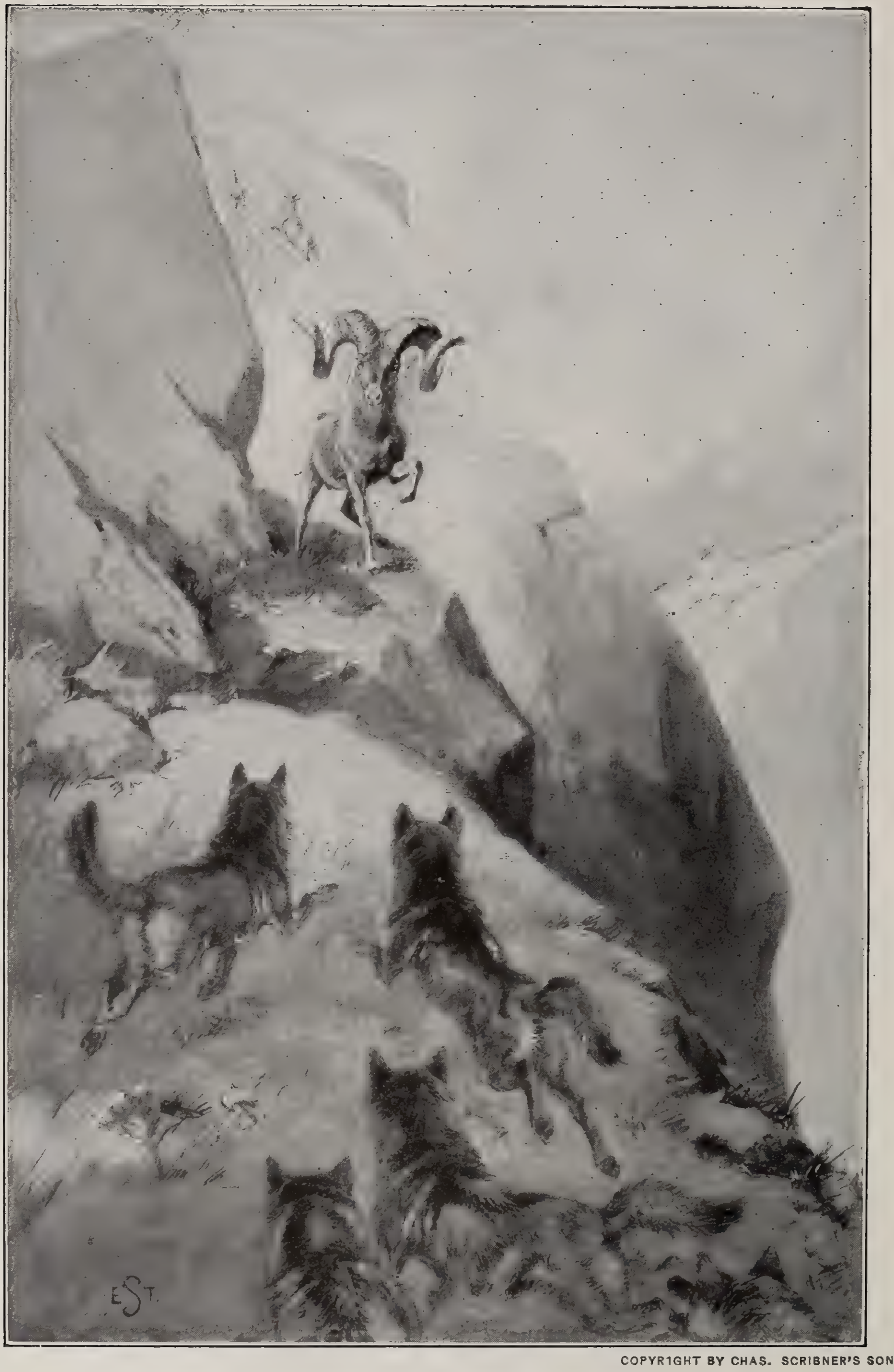
Doctor—I can not be sure yet. Have you noticed him doing anything unusual lately?

"Let me see. Well, last evening, instead of lighting his cigar the moment he left the table, he walked into the library and put on his smoking jacket, smoking cap and slippers before beginning to smoke."

"Hum! My, my!"

"And, later, when he wrote a letter, he wiped the pen on the penwiper."

"Horrors! It's paresis!"—New York Weekly.



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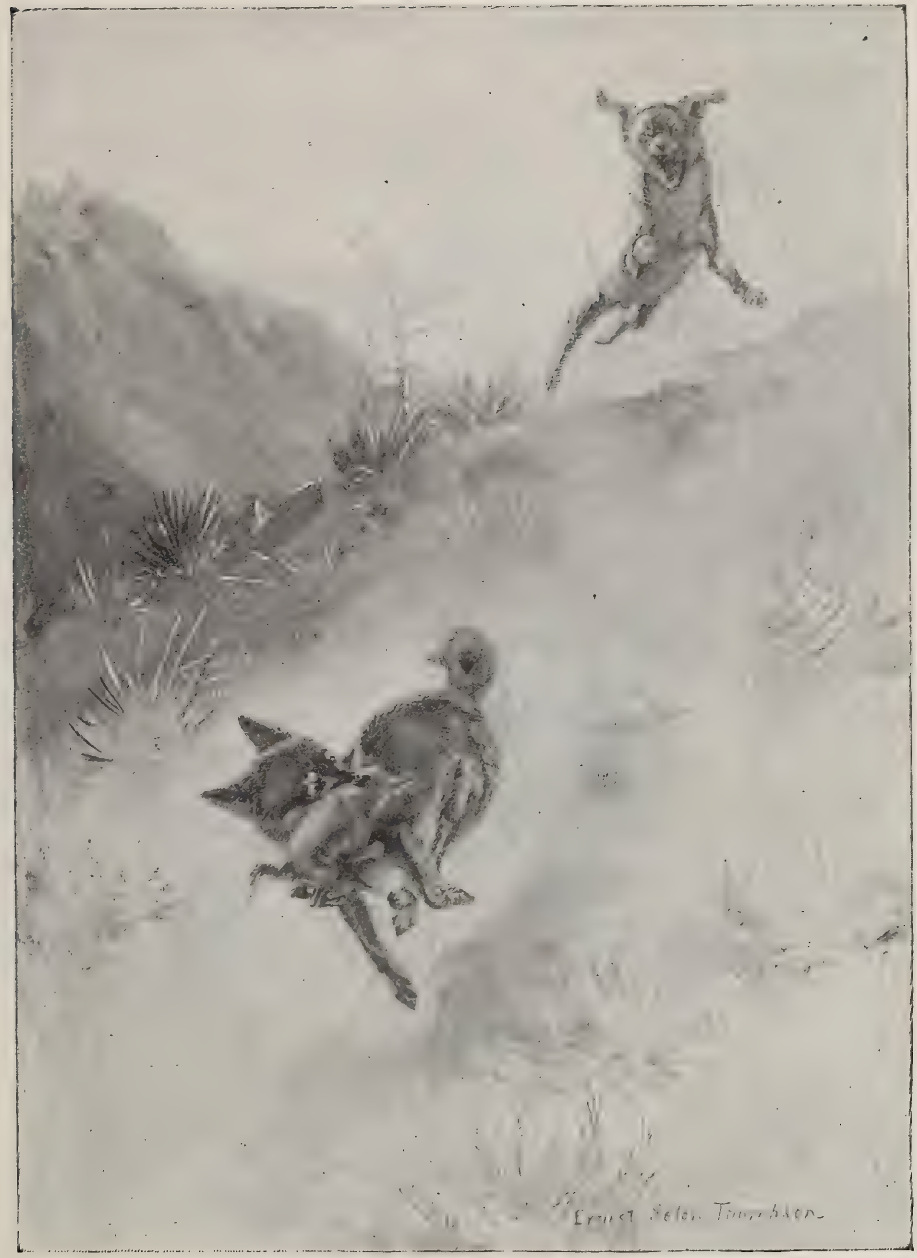
KRAG: THE KOOTENAR RAM.
Illustration from "Lives of the Hunted," by Ernest T. Seton. By courtesy of Charles Scribner's Sons.
(See Page 237.)


Ernest Seton Thompson

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TITO: THE COYOTE THAT LEARNED HOW.

Illustration from "Lives of the Hunted," by Ernest T. Seton. By Courtesy of Charles Scribner's Sons.

(See page 237.)

A NATIONAL GAME PRESERVE IN ALASKA.

W. T. HORNADAY.

To-day, Alaska contains the grandest hunting grounds in North America. They are inhabited by the giant moose, the largest antlered animal on the earth; the Kadiak brown bear, largest of all flesh-eating land animals; and the mountain caribou, largest and finest of its genus. The snow white mountain sheep is there, the mountain goat, black and yellow bears galore, and the rare, new glacier bear, as yet never seen in captivity, and in only one museum.

NEW YORK ZOOLOGICAL SOCIETY COPYRIGHT. 1900.

KADIAK BEAR IN THE NEW YORK ZOOLOGICAL PARK.

All these fine animals are being slaughtered, by sportsmen, hide hunters, head hunters, and Indians, who in true Indian fashion kill often 5 animals for every one they properly consume. In the United States statutes, there is not one line of game law either to protect the game of Alaska or restrict its slaughter in any manner.

Nature has been millions of years in developing the wonderful animal forms which inhabit our Arctic province, but which foolish and shortsighted man is now thoughtlessly exterminating. Unless quick and effective measures are taken by Congress, the next 10 years of slaughter will wipe out the work of ages, and leave Alaska only a barren, lifeless waste of rugged mountains and dreary tundras. Already the Western side of Alaska has been almost cleared of large mammalian life.

The favorite haunts of the grandest game of Alaska are not, and never can be, adapted to the wants of the husbandman. So far as known, they contain few precious metal deposits worthy of mention. Those rugged, rocky crags and peaks never will know the wire fence and the cowboy. Those mosquito-ridden, water-soaked tundras invite the wild goose and the sandhill crane, not the plow and the harrow.

Economically, there is no reason why nature's great natural gameland in southern Alaska should not be fixed and established for all time as a National game preserve, and made a heritage for generations yet unborn.

We of to-day have no right, either moral or legal, to destroy all the zoological resources of nature, and hand over to our grandchildren a world destitute of wild life. The resources and the beauties of nature are an entailed heritage, which it would be criminal in us to destroy.

What is our duty in Alaska? The answer is simple: the logical sequence of existing facts. As if disposed by Nature to make easy the task of preservation, a narrow strip of coastwise territory in Southwestern Alaska, extending from the head of Bristol bay around to Yakutat bay, is to-day a natural park, stocked abundantly with the grandest wild animals now living in North America. This region is the home of the giant moose, caribou, Kadiak bear, white sheep, mountain goat, glacier bear, black bear, ribbon seal, and a host of smaller forms. It is inhabited by a small number of Indians and Aleuts, and a few white traders and hunters. Congress should pass a law creating of this territory a national game preserve and providing for its effective protection and regulation, on about the same general lines as the Yellowstone Park. If it is found advisable to permit a limited amount of hunting under government license, let the law so provide. The interests of the natives can be conserved, but no Indian that ever trod moccasin or bootleather ever again should be permitted to slaughter big game at will. Their shameful work in Western Alaska should never be repeated in the South. The sale of breech loading firearms to natives in that territory should be stopped immediately before it is too late.

The interior boundary of the game preserve which I believe should be created, should, for reasons too numerous to state here, be as follows:

Begin at Nushagak, extend along the Nushagak river to its confluence with the Malchatna; thence along that stream to where it crosses the 155th meridian of West longitude; thence in a direct line to latitude 62 degrees, and longitude 152 degrees, which point is North of Tyonek, and distant therefrom 80 miles; thence Eastward along the 62d parallel of latitude, to where that parallel crosses the Copper river; thence to the summit of Mt. St. Elias, and the head of the Northeasterly arm of Yakutat bay. This reservation includes the whole of the Alaska and Kenai peninsulas, Kadiak island and Afognak island, but no other islands.

There are many reasons why the boundary and the areas included in the preserve should be as above, and neither more nor less. It is not claimed, however, that the remainder of Alaska should be left without game laws. Far from it! But that is another matter. This area is clear cut, easily protected, and as yet well stocked with wild life. It contains all large species found in Alaska except the polar bear. In the preservation of a grand series of North American types, this is the line of least resistance, and the shortest and surest road to a result. It can be made to serve as a great reservoir for animal life, like the Yellowstone Park, forever overflowing and stocking the regions around it.

A bill providing for a national game preserve in Alaska, has been introduced in Congress. This bill provides for reserving the Kenai peninsula, and such other territory as the President may reserve by proclamation. If it receives sufficient indorsement from game preservers, it can be passed at this session. All persons who are willing to aid in securing its passage can do so by writing to their congressional representative in behalf of the "Alaska Game Preserve bill," and they are requested also to communicate with me at the New York Zoological Park, stating their views on this subject.

There is a man at the Pan who advertises artificial legs by walking about on a pair exposed to view from the knee down. The other day a curious and sympathetic old lady investigated this phenomenon.

"Did you cut off your legs so as to exhibit them things?" she asked.

The poor fellow assured her that his job wasn't worth so much to him as his own legs would be. Then, after further critical examination, she said,

"Wa'al, I s'pose the feet are natural. They look so."—Buffalo Commercial.

MARCH.

A. L. VERMILYA.

Come on, wild March, you windy knight, and blow
The storms and chill of winter far away;
Sweep o'er the land, the grim Ice King dethrone,
And clear the path for April and for May.

Folks rail at you, old chap, and call you names;
They say you're full of bluster and of bluff;
But well I like your energetic ways,
And so I say, "All hail! you're just the stuff!"

Blow far away the gloom of winter days;
Drive on the frowning, leaden-colored skies;
Bring back the birds from sunny Southern climes—
The birds for which we wait with longing eyes.

And when fair April and her sister, May,
Shall carpet smiling earth with myriad flowers;
When rippling brooklets wander through the fields,
Where joyous anglers spend the springtime hours;

Then, March, good friend, we'll ofttimes think of you,
And say, when resting 'neath the whisp'ring trees,
"He went before, with gusty winds and strong;
Behind him came the balmy summer breeze."

AMATEUR PHOTO BY WM H. FISHER.

A NATURAL POSE.

Winner of 14th Prize in RECREATION'S 6th Annual Photo Competition.

THE OLYMPICS AND THEIR ELK.

F. A. JOHNSON.

Late in the summer of 1899, we sought a new and unexplored field for an outing. With light outfits, saddle and pack horses, we had roamed over the White and Bear river regions of Colorado, over the Big Horns from end to end, through the Bear River, Salt River, Gros Ventre, Snake River and Teton range, and into the Wind River and Shoshone mountains. We had done some exploration work in the Rockies of Montana, near the Northern boundary line, where the wildest rocky scenes of all were found; but with the exception of the latter region, all were well known to many others, and had been fully described. Alaska was considered, but the Olympics, of which comparatively few people have any extensive knowledge, invited study. Examination of the most recent maps showed that surveys had been made of Eastern and Northern portions of that region, and of a reservation on the Pacific coast; but the great heart of the country had never been traversed even by the surveyors. Rivers were outlined radiating in every direction from a common center, apparently not more than 10 miles square; coast ranges were shown, and we knew from general experience that mountain ridges separated the beds of streams. Every map revealed a range running nearly East and West about 60 miles, and North of that range, in the heart of the wilderness, was seated old Mt. Olympus, in solitary grandeur. We searched in vain for information as to the central region. Articles in Recreation gave graphic pictures of the Eastern slope, dropping down into Hood's canal, and the region about Crescent lake, in the Northwest; and it should be here noted that the files of Recreation contain an immense store of modern geographical knowledge not to be found elsewhere. Letters from sportsmen of the Washington coast informed us that the great white dome of Olympus had never felt the foot of man, and was not accessible. This fact brought a decision.

The party consisted of 4; 3 lawyers and a physician who is a specialist in surgery; all men of some experience in such trips. A superb train of the Great Northern carried us to Seattle, where we took a steamer, landed at Port Angeles, employed Mr. C. C. Bowman and a cook, outfitted with substantial provisions, and horses for packing and riding, as far as they could be used, and ascended the valley of the Elwha river, determined to reach the heart of the region on horseback or sole leather. Mr. Bowman had ascended the valley about 30 miles, but beyond that it was unexplored. On the way up we concluded that horses could not be taken through, and employed Martin Hume, a hunter having a cabin in the valley, which we found ornamented with the skins of black bear and with elk antlers. Passing through Press valley, so named by a party of newspaper men from Seattle who had penetrated to that point from the East side, and on through forests of great cedars and firs, 4 to 10 feet in diameter; through clumps of familiar alders, here grown into trees 60 feet high and a foot in diameter; climbing up and down over a continuous succession of great mountain spurs; carefully selecting old elk trails wherever they led in the right direction; stopping to rescue horses which had fallen down the steep slopes, and on 3 occasions to aid the doctor in applying modern antiseptic surgery to the poor brutes, where gashed and torn by the rocks, we finally, on the fifth day, reached a point where 3 forks form the main river. There we made a main camp, and sent one of the men back several miles with the horses to a place where they could find feed.

Leaving 3 of the party in camp, Hume undertook to explore the North fork, and Bowman and I, the other 2. It was arranged that all should return the next day and report results. We started early in the morning, outfitted with rifle, hatchet, camera, knives, and a small pack of provisions, appreciating so well the work ahead that even a blanket was discarded. One branch was soon found to be short, and Bowman and I ascended the middle one. After a half day of as hard climbing as the country affords, we reached the top of the divide, between towering mountains covered with snow and ice, and found this branch had its source in Lake Mary.

About 100 feet farther South, and separated from Lake Mary by a solid wall of volcanic rock, is Lake Margaret, the waters of which flow Southward into the Quinault river. Neither lake covers more than 2 acres, but they are little gems, and the valley of the latter is a veritable paradise for a sportsman and lover of mountain scenery. It is not more than 3 miles long and is hemmed in by lofty mountains on either side, which are dotted with groves of firs and grassy parks, kept green by the melting snow above, as well as by the almost continuous rain of that region.

The lower valley is divided by narrow strips of timber into 4 parks, carpeted with a fine growth of grass and a profusion of flowers, and dedicated forever to the elk and bear. No horses will ever be able to graze there, unless hauled up by a derrick and several hundred feet of rope; nor can a real tenderfoot ever see its beauties, as muscle, wind, enthusiasm and dogged perseverance are required to reach its portal. There we found fresh tracks of bear and elk in abundance, and in making a trip of less than 2 miles down the valley we located 3 bands of elk in the parks up near the perpetual snow. This valley seemed to be their summer home, and is apparently a safe retreat.

Returning to the divide before dark, we prepared for passing a wet night without a blanket, by building a good fire under a short but dense-leaved fir. Our clothes dried while we prepared our supper, which consisted of coffee made in tin cups, bacon broiled on a forked stick, and warmed bread. By replenishing the fire occasionally we were comfortable and slept well. At daybreak, Bowman started down to the main camp to conduct the rest of the party, in light marching order, to "Camp Perfection," with instructions to inform them that there would be fresh meat ready for broiling on their arrival. He could not get back with them until late in the evening, and, though left alone, I had before me the most glorious of my many happy days in the mountains.

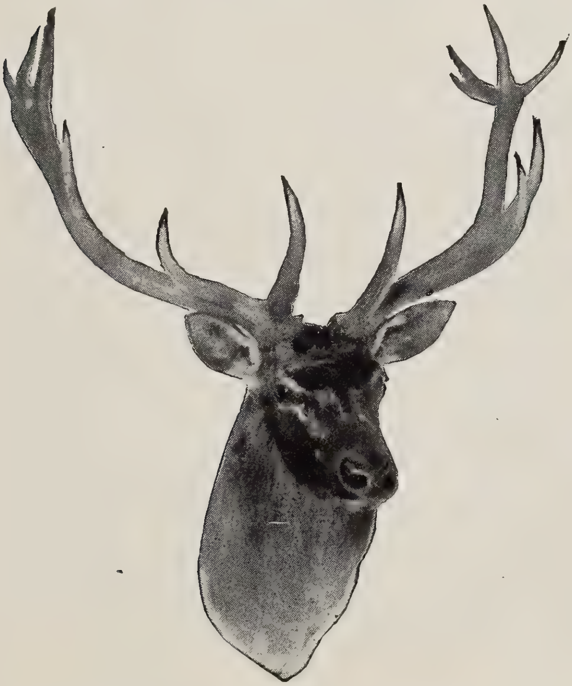
For 6 days we had been clambering slowly up a leafy cave, between giant firs and cedar tree trunks, and through masses of dripping ferns as high as the horses' backs. There were few places where the view could range a mile, or the baffled sun could send its warming rays to the ground; but the dark brown water ouzel, almost the only living thing, dived into the rushing river, made his way against the current in search of food, and then from a rock tetered his welcome to the stranger, and sang the sweetest songs of all the feathered kind.

Practically certain of securing needed camp supplies, and confident that this valley, opening out only to the sky, was virgin hunting ground, I was in no haste to start out in the gray dawn to secure game. Always seeking to camp on the highest parts of the mountains where water and wood could be secured, but generally compelled to go down into a valley, I was in a state of perfect contentment, and ascended a round-top knoll on the divide next to the outlet of Lake Mary. The scene down the fork toward the Southeast was cold and dreary. A dense fog, or cloud, filled the valley below, and its upper surface rolled and heaved in giant waves and billows like the great un-Pacific ocean behind me. As the white light of the East changed into pink and then into crimson, the highest peaks flashed out like torches. Then the snow fields, the domes of dark volcanic rock, the clumps of firs, grassy parks, sloping valleys, tiny streams, countless cascades, and finally the deep cañons, each with a silver thread of wearing water, rose out of the cold gray plate of nature, a brilliant positive, perfect in focus, detail and contrast, and a masterpiece of color photography, fixed in the mind forever.

It had not before been my good fortune to witness the birth of a new day and a new world from a mountain top, but since then the heads of our horses have frequently been turned upward as the evening shades fell, and our campfires have blazed at the timber line.

There I lingered, and with a field glass studied the details of the magnificent scene. I wondered when some inspired scientist would shape a lens to show the grand sweeps of mountain sides and valleys, the towering peaks, and the deep cut cañons as they appear to the eye, so the weak might revel in the scenes now visible only to the strong. Then, disappointed in advance by what I knew the results must be, I took the camera, and with an apology to the ruler of the crags, stealthily exposed a number of plates in a most humble spirit.

A glance across the valley Northward reminded me of my undertaking to provide meat for 7 hungry men; also of Dr. Jekyll and Mr. Hyde. Unquestionably there is something of the savage in every sportsman. When the 30-40 Winchester was substituted for the camera, and the stroll down the valley began, there was no haste, as the whole region was mine alone; but interest became lively as to whether the meat would be bear or elk. It was certain to be one or the other. When about a mile down the valley I saw 3 straggling elk feeding up above the timber line, but walking down. When they were out of sight in timber I took a position by a rock in an open park from which I could see them when they came out. A half hour of quiet waiting and watching resulted in hearing them splash the water in an alder bounded stream, but in a moment a fickle air current gave scent to the band, and they rushed up the stream, protected by the bushes. An open space, however, must be crossed. A string of cows ran out ahead, which seemed strange to me, and the 2 bulls brought up the rear. I took a quick shot at one while he was in the air, and he went out of sight. The climb up this open glade furnished a surprise as to elevation, though not as to the range. When within about 100 yards I saw the elk's antlers moving. Climbing a few yards farther up, I saw him get on his feet, and gave him a shot in the neck. He fell as if struck by lightning. Throwing another cartridge into the barrel, I approached within 40 yards. Again he struggled to his feet, wheeled and charged down toward me, but with a lurching and unsteady gait. I watched with intense interest, my finger on the trigger ready for a third shot. As I was about to put a bullet into his head, he stumbled, pitched down and struck on his head and antlers, landing on his back about 5 yards to my left. There he continued pitching and rolling for fully 75 yards, until he struck against some large rocks, where he finally died. As I had killed a number of Rocky mountain elk, each with a single shot from my 30-40 Winchester, I felt a lively interest in knowing the point where the first soft point bullet entered, but he was too heavy for me to handle alone. All I could do was to dress him partially and obtain some choice cuts for the promised evening meal. The rest of the party reached the camp in due time. The next morning we ascertained that the first shot struck him on the right side of his neck, well up, about 6 inches back from the antlers, passed diagonally upward and into the thick bone of the skull, under the left antler, which was found to be pulverized. The upper edge of the vertebræ was also shattered where the bullet entered. With such a shot it is easy to understand how the animal lost mental control, but the vitality exhibited seems worthy of mention.



A MONSTER WITH 7-POINT ANTLERS.

The second day another member of the party secured a monster with 7 point antlers, 56 inches spread, weight 32 pounds, which we saved with the cape, and which was mounted by Mr. C. E. Akeley, the art taxidermist of the Field Columbian museum, who has taken and is mounting, in the highest style of the art, a complete family of Olympian elk.

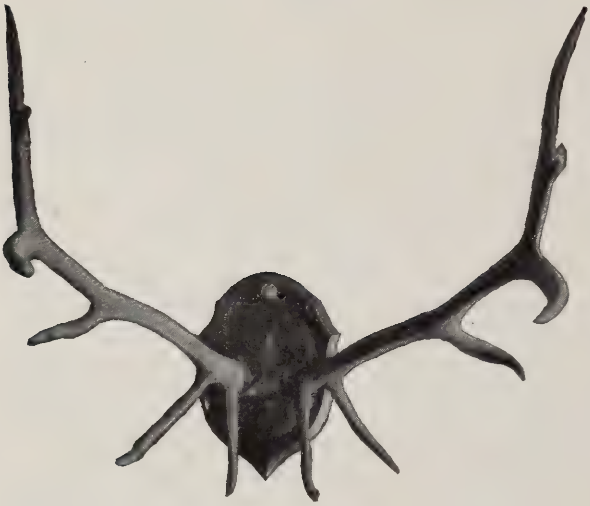
From the top of the mountain at the head of the valley we obtained a long range view, and ascertained that there is no range running East and West, as shown on the maps. The valley of the North fork, which Hume had partially explored the day before, and a glacier 3 or 4 miles long, which sweeps down from the dome of Mt. Olympus, afford the only means by which the mountain can be ascended. A mile or 2 below the foot of the glacier is a fine park of about 10 acres, where horses can feed for weeks. Returning to the forks, 3 of us, with one pack horse, ascended the North fork. After turning out the horse we climbed the long, steep body of ice and snow, to the top of the grand old mountain; but were greatly disappointed by the rising of a dense fog as we went up, which turned into rain and snow. We were thus prevented from taking, from that central point, photographs from which an accurate map might be sketched. In this only passage way to Mt. Olympus we found perpetual snow and ice at an elevation of less than 3,000 feet, and the upper timber line at about 4,700 feet.

The elk are of a distinct variety, now known as *roosevelti.* Among the features which distinguish them from the *canadensis* are their large size, heavier antlers, dark head and neck, legs and feet, in fall and winter pelage, large rump and great depth of shoulders, giving them the appearance of having short legs. The beams of the antlers near the head are a third larger than those of the Rocky mountain variety, and I believe that the bulls of the same age are one-third heavier. Judging from the known size and weight of my saddle horse, I am satisfied that the larger bull taken on this trip would weigh over 1,000 pounds.

In naming this lord of the mountains, Prof. C. Hart Merriam wrote, "I deem it a privilege to name this splendid animal Roosevelt's wapiti. It is fitting that the noblest deer of America should perpetuate the name of one who, in the midst of a busy public career, has found time to study our large mammals in their native haunts, and has written the best accounts we ever had of their habits and chase."

MAMMOTH ELK HORNS.

The New York Times of August 10th says, in one of its editorial columns, that the mammoth elk horns in my possession are not elk horns, but moose horns. How is the writer to know that, without having seen them? It is also stated that the European elk is an elk, which can not be denied; but when the assertion is made that the American elk is a moose, I am not prepared to accept the statement as truth, for the shapes of the prongs differ.



WHO CAN BEAT THEM?

I enclose a photo of these antlers. The horns measure 9 feet and 3 inches from tip of beam to tip of beam across the skull, and they have a spread of 53¼ inches. The beam lengths are 55 and 56½ inches, and, of the 10 prongs, the longest are 16 and 17 inches. Had these elk horns been differently mounted, with the animal's head between them, their spread would have been 24 inches greater. These elk horns were picked up many years ago, on the plains, by H. W. Sherrill, of Denver, Colorado, and they have been in my possession about 30 years. They have never been tampered with, as in the case of the Montana elk horns described in a previous issue of Recreation. If there is a larger pair of elk horns in America, I should like to buy them, although I am not a collector.

Probably there is but one larger pair in existence. Those are in possession of Emperor William of Germany. They were presented to him by Hans Leiden, the German consul at The Netherlands, and the Director of the Zoological Garden at Cologne. Those horns measure 12 feet from tip of beam to tip of beam across the skull, and have a spread of 62 inches. They have a beam length of 67 and 67½ inches, respectively. The longest prongs are 22 to 22½ inches in length, and there are 12 of them.

W. C. Darling, Henderson Harbor, N. Y.

FISHING AT "CAYUGY BRIDGE."

G. A. WARBURTON.

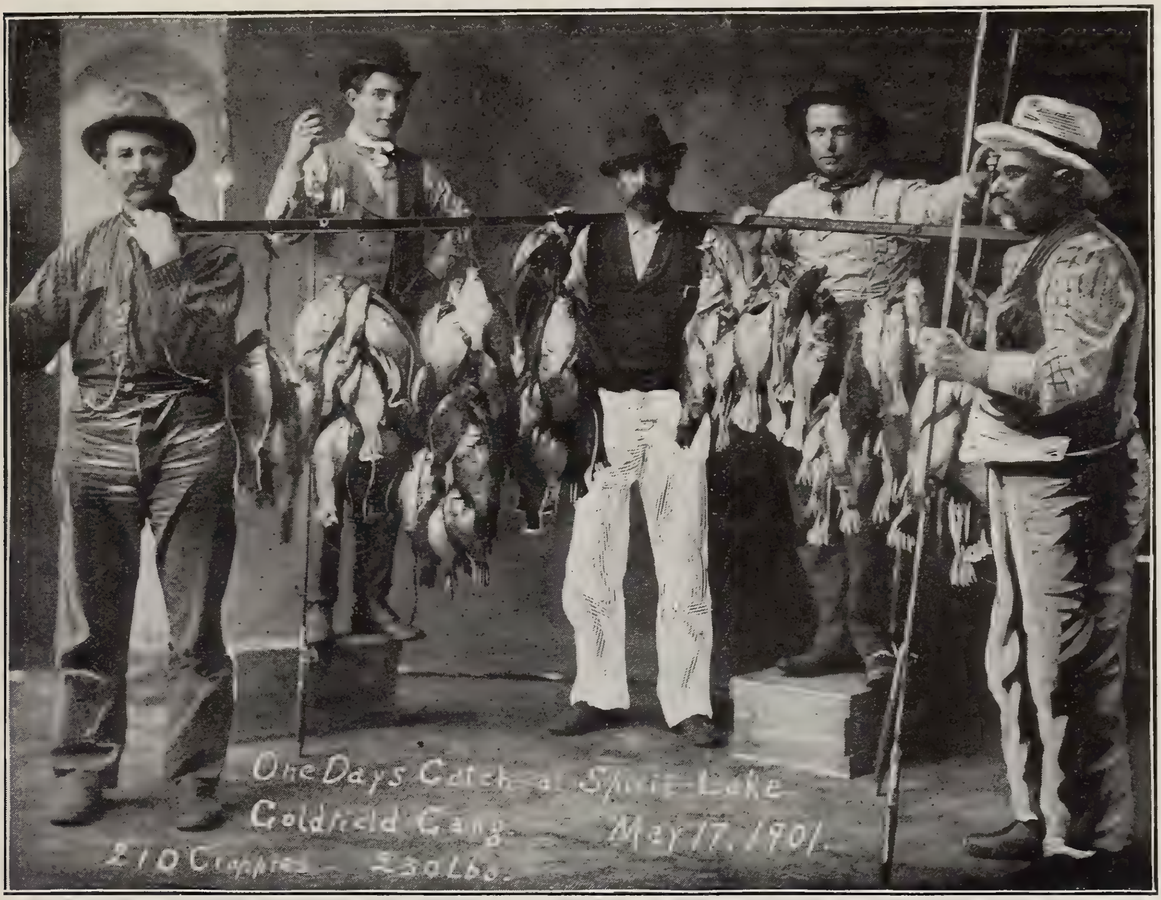
Some may go for leaping ounaniche,
  In the turbulent Saint John;
Some may seek the mighty salmon,
  In the streams of Oregon;
Some may lure the speckled trout,
  From brooks or ponds in Maine;
But if I may choose my fishing ground
  When I go out again,
I ask no better place to go, no higher privilege,
  Than fishing with the younger boys
At old "Cayugy Bridge."

The fish they were not plenty,
  And the tackle wasn't fine;
You could buy it for a quarter,
  Hook and sinker, pole and line;
But I tell you it was pleasure,
  Just to sit and wait and wait
For the bass that never touched it,
  While the shiners stole your bait!

We never called it "angling,"
  In those days so long ago;
It was only simple "fishin',"
  And we went for fun, not show.
Don't forget, my son, your father
  Now doth solemnly allege,
That his happiest days of fishing
  Were at old "Cayugy Bridge."

THE GOLDFIELD HERD.

I send you under separate cover the photo requested. The gentlemen shown in the picture actually caught the fish displayed, and what is more, that is only a sample of the many beautiful catches made at Spirit lake every year.


One Days Catch at Spirit Lake
Goldfield Gang.
May 17, 1901.
210 Croppies 250 Lbs.

ONE DAY'S CATCH AT SPIRIT LAKE, IOWA. 210 CROPPIES 250 POUNDS.
J. A. Conger, Harry Agard, John Cameron, S. G. Keith, Ted. Hunton.

It may be of interest to readers of RECREATION to know that the spirit of true sportsmanship is on the increase in Iowa. Our legitimate sportsmen are organizing for the prosecution of the poachers, and with the assistance of our new State fish and game warden, are making things lively for the violators of the law. Only this week Mr. Lincoln had shipped to his home in this city a 900-foot seine, captured at Fort Madison and confiscated under a law. A number of successful prosecutions have been made for violations of the chicken law, and now we are out to protect the quails.

The only way to stop poaching is for legitimate sportsmen to organize in the various communities and offer rewards for the apprehension of the scoundrels who violate the law. We have an informal organization here, and so far as we can learn the sportsmen of Cedar Rapids have observed the law closely. Some pot hunters were out once or twice early in the season, but discovered that the boys meant business, and put up their guns until September 1st.

W. E. HOLMES,
City Editor the Gazette, Cedar Rapids, Ia.

ANSWER.

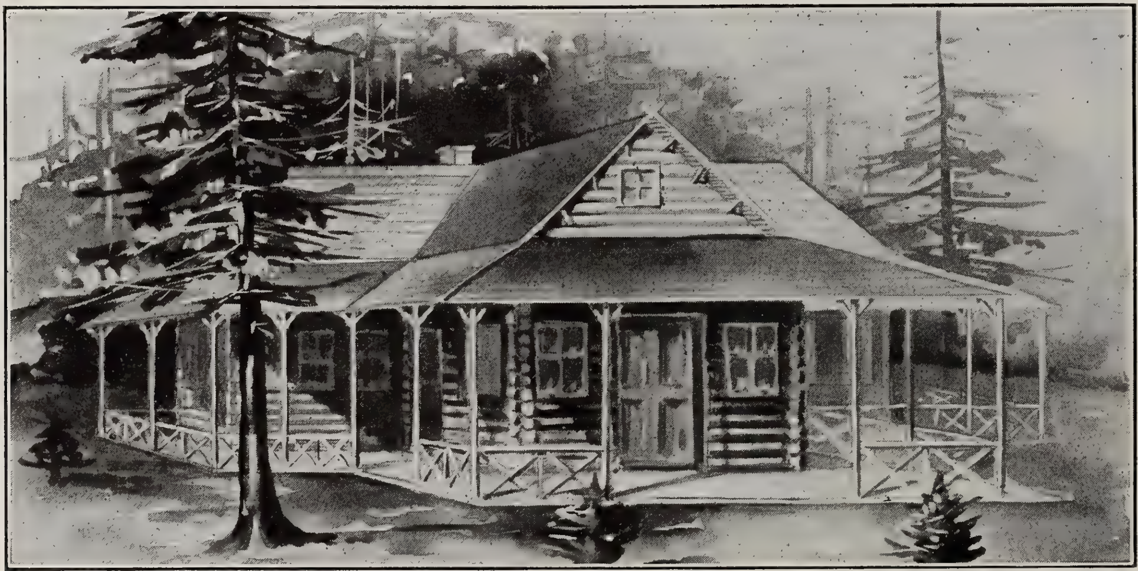
You say "the gentlemen" shown in the picture actually caught the fish displayed. I regret to say that I, in common with thousands of other men, can not agree with you in the term you apply to these chaps.

The legend written on the picture says, "210 croppies, 250 pounds."

There are 4 men shown in what purports to be the "Goldfield Gang," and who are supposed to have done the fishing. The man in the center, who seems to bear the greater portions of the burden, is supposed to be the guide, or oarsman, and is not supposed to have done any of the fishing. Leaving him out of the count, it seems that the 4 men averaged nearly 50 fish each, and that the weight of each man's catch would average over 60 pounds. Do you call this the work of gentlemen?

You say further, "The spirit of true sportsmanship is on the increase in Iowa." I am glad to know of this, but the Goldfield Gang are not entitled to figure in this advancement. According to their own showing, as made in this picture and the record printed therewith, these chaps belong rather to the class of poachers whom the legitimate sportsmen you refer to are organized to prosecute. The work of these so-called "gentlemen" is much more reprehensible than that of the poor market fisherman from whom the 900-foot seine you speak of was taken, at Fort Madison. I have a great deal more respect for the poor man who takes fish in a net and sells them for food, than I have for Ted Huston, Editor S. G. Keith, Harry Agard, and A. J. Conger, who take 60 pounds of fish each in one day, on a hook and line; who then line themselves up in front of a camera and have themselves photographed with their swag with that disgusting "we caught 'em" look on their faces. The market fisherman is a gentleman as compared with the members of the Goldfield Gang.

You say the only way to stop poaching is for legitimate sportsmen to organize and offer rewards for the apprehension of the scoundrels who violate the law. There is probably no legal limit established by the laws of your State as to the number of fish or the number of pounds of fish a man may take in a day with hook and line. And so it is not likely that the Goldfield Gang have laid themselves liable to prosecution by taking a boatload of fish in a day; but they have merited the contempt of all true sportsmen, by making hogs of themselves in the first place, and then by having themselves photographed with the result of their slaughter, in order to stimulate others to "break the record."—EDITOR.



PROPOSED CLUB HOUSE TO BE BUILT BY THE MASHIPACONG CLUB ON ITS GROUNDS IN SUSSEX COUNTY, NEW JERSEY.

"A man is the most sensible of all animals, is he not?"

"Certainly."

"Then I wonder why he doesn't wear a loose, comfortable collar like a dog's."—Washington star.

CONGRESS HAS FULL POWER.

The following correspondence brings good news to all friends of America's wild animals:

House of Representatives,
Washington, Dec. 5, 1901.

Hon. P. C. Knox,
Attorney-General U. S.

My dear Sir: In furtherance of my verbal inquiry regarding your views on the subject of forestry legislation I wish to obtain the benefit of your judgment on the Constitutional powers of Congress to control the various forest reserves where they are situated in the States.

As to those reserves situated in the Territories, it seems to me quite clear that Congress can accept the Territorial laws or can modify or change them at pleasure, and that those reserves are clearly within the jurisdiction of Congress.

As to the enactment of federal laws to punish the setting out of fires or trespasses in cutting or injuring the timber, I should be pleased to have your views as to what constitutional limitations, within the limits of the States, would interfere. In view of the permanent withdrawal of these forest lands for a general national purpose, would the powers of regulation and control be greater than those which may be exercised in the preservation and management of ordinary public lands open to entry or settlement, where the same are covered with timber?

These questions involve the general power of enacting statutes punishing the persons who may injure the forests, as well as making and enforcing regulations for their case.

In these forests the wild game have opportunities to breed and find shelter.

An enlightened public sentiment, though unfortunately too tardy in its development, has finally led to the enactment of efficient and adequate game protection in nearly all the States and Territories, which laws, if suitably enforced, would in most instances give adequate protection. Unfortunately, in many localities these laws are either wholly or in part disregarded. The President, in his message, has asked for the enactment of laws creating game preserves in these forest reserves. This recommendation involves the question as to the extent of Congressional power; also the choice of methods.

If Congress has no power or control over the subject within the limits of a State it has unquestioned authority, in my judgment, to prevent interstate commerce in the dead bodies or living creatures themselves. This control Congress has already asserted in the federal law prohibiting transportation from one State to another of such game when killed in violation of State laws.

In the disposition of this question in the forest reserves the custodians of the forests might be directed to make complaints and enforce proceedings under the local statutes, thus supplementing the efforts of the State authorities. On the other hand, special federal statutes might be framed, if constitutional power exists, to deal directly with the question. Indirectly, protection might be furnished by preventing trespass of all kinds during certain seasons, thus giving incidental protection to the wild inhabitants of these national forests during certain portions of the year.

In this border land of State and National authority I regard it as of the utmost importance that the legislative should keep in view the rights and powers of the States, and that care should be exercised to avoid conflict of jurisdiction where so much depends on having the laws backed up by a friendly local public sentiment.

I should be gratified to have the benefit of your judgment as to how far legislation on these various subjects would be within the constitutional domain of the Congress.

Respectfully,
John F. Lacey.

Department of Justice,
Washington, D. C., Jan. 3, 1902.

Hon. John F. Lacey,
House of Representatives.

Sir: Complying with the request therefor, contained in your note of December 5, 1901, I here transmit to you some of my views on the questions there suggested. These questions are as to the power of Congress to enact laws for the protection and control of, or relating to, our national forest reserves, when within the limits of a State; and specifically to make such reserves, to some extent, refuges for the preservation of the remnant of the game in those localities. They necessarily involve, also, substantially the same questions as applicable to the general public domain; for, so far as concerns the question of federal legislative power, no difference in principle is perceived.

I agree with you that, as to those reserves situated within a territory of the United States, this federal legislative power is ample; and the questions are those arising when such reserves are within the limits of a State; but in order to determine those, it may be well to refer briefly to the nature and source of this federal power over the Territories.

As to the source of this power, there has been a diversity of opinion, and the power is claimed to have arisen from that provision of the Constitution which gives Congress the "power to dispose of, and make all needful rules and regulations respecting the territory and other property belonging to the United States"; and other sources of this power have been suggested. But, whatever its origin, the existence of this power, as the Supreme Court has several times said, is undoubted.

While in the Dred Scott case (19 How., 393) it was held that this constitutional provision applied only to such territory as the United States then had, and did not apply to that subsequently acquired by treaty or conquest, this has not been acquiesced in in later cases, several of which point to this provision as, at least, one of the sources of the power and control which Congress exercises over the various Territories. I think it may be taken as now settled, that this provision confers on Congress the power stated, over all the Territories.

Congress, then, having sovereignty and ample legislative control of the Territories, while they are such, and of the public lands therein, one important question is: How far this sovereignty and right of control is surrendered to the State by its admission into the Union? Here we may look again to the Constitution, then to the Acts admitting such States, and to their constitutions when admitted.

First, as to the federal constitution. Assuming, as I think we may, that the provision above referred to applies to all "territory and other property belonging to the United States," whether then already, or subsequently acquired, what was the intended limit of the duration of the power thus conferred? Was it intended to continue only until the new State was admitted, and to then cease and leave Congress and the Government without any power to dispose of or to make needful rules and regulations respecting the public lands or other property belonging to the United States, or was it intended to continue as long as its subject matter and its necessity continued? If the former, we must look to some other source for the power of Congress to dispose of and regulate the management of the public domain within the limits of a State; if the latter, then this provision is ample.

I do not consider here the case of military forts, posts, dockyards, etc., for which special provision is made in the Constitution, nor sites for postoffices, court houses, etc., the question of jurisdiction over which is generally settled by convention.

When the Constitution was adopted we had but one Territory, though it is fair to suppose that others were looked on as possible. The one we had was acquired under conditions which required its admission into the Union in not less than 3, nor more than 5, States with equal sovereignty with that of the original States; and the Constitution provided for the admission of new States. Thus, with the subject of new States directly in mind, did the framers intend to give Congress power to dispose of and manage the public lands, while in a Territory, and to leave it without the power to do either after a State was admitted? For it could not have escaped them that to confer this power while the Territory remained such, was, by the strongest implication, to deny it afterward. Did they intend this?

In the first place—and this is quite sufficient for the construction—the provision itself imposes no limitation, either of time or of Territorial or State condition; nor does the nature of the power conferred imply any such limitation. On the contrary, the power is as broad and general as language could make it, with no limitation whatever, either expressed or implied. The reason and necessity for the power are tenfold stronger after the admission of the State than during the existence of the Territory; and there is no rule of law or of construction which will permit us to impose a limitation which neither the instrument itself nor the nature of the power imposes or implies. The general rule is that when a power is conferred without limitation, express or implied, it continues as long as the necessity for its exercise; and the Supreme Court has, more than once, said (as in Gibson v. Choteau, 13 Wall., 92, on page 99) "That power is subject to no limitations."

The difficulty and misconstruction here arise chiefly from the use, in this clause, of the word "Territory." If, instead, the expression had been that Congress should have power to dispose of and make all needful rules and regulations respecting the land and other property, there could have been no question but that this power of disposition and control continued after Statehood as before. This is exactly what the provision does mean. It does not refer to organized Territories, as to which the term "dispose of" and make "rules and regulations," and "other property" are not appropriate; but it refers to land and other property. This is expressly held in United States v. Grotiot (13 Pet., 526), where it is said (p. 536): "The term 'Territory,' as here used, is merely descriptive of the kind of property, and is equivalent to the word lands. Congress has the same power over it as over any other property belonging to the United States, and this power is vested in Congress without limitation."

This, of itself, would seem to make the meaning fairly certain. Consider the situation. After a long struggle, which had delayed the adoption of the Constitution, the people had finally settled the ownership and sovereignty of the lands outside of the States in the General Government. It was claimed that as this territory had been wrested from Great Britain by the blood and treasure of the people of all the States, it should be held for their common benefit, and not for any State. It was finally so settled and agreed, and the whole territory was ceded to the United States for the common benefit of all. At that time, next to State jealousy of federal power—if second to even that—there were mutual State jealousies of the power of each other, and this was one of the causes of the dispute over the public territory. Yet it was certain and well known that, on the admission of the expected new States, with their sovereignty within their borders, all of the sovereignty and control of this territory within their borders, which was not in the United States, would be in those States respectively; and that that sovereignty and control which they had so long struggled to place in the United States would be passed over to those 3 to 5 States, as they were admitted. This was certain to be the case, for, if Congress did not have this sovereignty and control after a State was admitted, then the State did have it, and no other State could interfere. Those States might then, by unfriendly legislation or by no legislation, or both, so hamper those lands, their sale, occupancy and control, as to render them of little value, except to those States and their people. It is simply incredible that this was intended. If it was not, then it was intended that this vital power of disposal and control should continue at a time when, of all others, it was most needed. While the Territory remained such the sovereignty of the United States was complete without any other grant than that contained in the cession, and this special grant of power was not at all necessary. Its chief, if not its only, use and purpose was that, when and after these lands passed into and under the sovereignty of a State, they should do so subject to the paramount sovereignty of the United States, so far as was needful.

In framing this dual government, this *imperium in imperio,* in which each State was to be, in many respects, sovereign in the Nation, and the Nation, in many respects, sovereign in each State, the separation of these sovereignties and their lines of demarcation must have received the most careful attention of those statesmen as one of the most important and difficult problems which confronted them. As the control and disposal of this territory was one of the most important and burning questions of the time, and had long been such—delaying and, for a time, endangering the adoption of the constitution—it would seem impossible that when dealing directly with this question provision was made for this control while in a Territorial state, and when it was little needed, and purposely omitted at a period when, of all others, it was most needed. We shall come nearer to the real meaning of this provision by reading it as it is so plainly written, without any limitation, either of time or Territorial or State condition.

If authority for this construction be needed, it is not lacking, and in another connection I shall refer to some cases which come first to hand.

Assuming then, as I think we must, that this constitutional provision confers on Congress the power of disposition and control of the public lands after the admission into the Union of the States containing them, how much, if any, of this power is surrendered to the States by the Acts admitting them into the Union as sovereign States? Here the general rule is certain, although questions may arise as to its application to particular cases. As far as its exercise is needful to the disposition and full control and management of these lands, Congress has always been and is capable of diverting, alienating or surrendering any part of it. It is uniformly held that, while the title of the United States to the public lands is absolute, as against every other title, yet it is held in trust for the ultimate benefit of all the people, in such manner as may be prescribed by law, and this is peculiarly the case as to the only Territory we had at that time. Congress then, being a trustee of the title, cannot divert, alienate, or surrender any power necessary or proper for the disposal, protection, preservation, control, or management of its lands, nor in any way discharge itself from the duty of executing the trust confided to it.

But, while this power to make all needful rules and regulations is also the power to determine what are needful; and while, therefore, this power so conferred is in terms absolute and unlimited; yet, notwithstanding some general statements of the Supreme Court, it may be well claimed that, after the admission of a State, there is, necessarily, a limit arising from other portions of the Constitution and the general powers of the State. For example, may Congress continue to legislate for this public land—some of it, perhaps, in small, isolated parcels—upon all subjects of municipal legislation, civil and criminal, and irrespective of the laws of the State on the same subjects, as it does, for example, in the District of Columbia? Or, on the other hand, is the power of Congress within a State limited to such acts, legislative or otherwise, as are required for the disposal, protection and control of such lands? Or is there, between these, a limit to federal power, legislative or executive? It is not necessary to discuss here the first of these questions, for no such general legislation is contemplated; and the other 2, also how far federal control has been surrendered by Acts admitting States into the Union, may be examined in the light of another consideration, namely the rights incident to ownership.

Subject to the eminent domain of the State, the collection of taxes, the service of process and other kindred superior rights, the ownership of land carries with it, as incident to and a part of such ownership, the right of exclusive possession and control, which includes the right to forbid and prevent intrusion thereon for any purpose, and to prevent and remove trespassers. The owner may forcibly prevent such intrusions if he can, or he may apply to the courts for relief, or to recover damages; but a private individual may not himself enact laws for the protection of his property or to punish trespassers on his lands. Is the United States in the same situation as to its lands within a State? Is it without power to itself enact laws for the disposal or management of its public lands within a State, or for their protection from fires, or the preservation of its timber or minerals thereon? This is undoubtedly the case, if the United States, as to such lands, has no other rights than those of an ordinary proprietor.

It must be admitted that much that is said by the Court in Fort Leavenworth R.R. Co. v. Lowe (114 U. S., 525) is directly to the effect that as to lands within a State, unless jurisdiction is reserved in admitting a State, or the land is acquired by the United States with the consent of the State for military purposes, etc., as provided in the Constitution, the United States has no other rights than those of an ordinary proprietor, and that, like other lands, they are subject to the sole jurisdiction and sovereignty of the State. It is in view of this that I discuss this question more elaborately than I otherwise should; but, if what is there said is to be considered as a denial of all legislative power of Congress over such lands, not only is it opposed to the uniform practice of the Government from the beginning, with the frequent approval of that court, and to many contrary declarations of that court, but the contrary is directly held in later cases.

What is said in that case must be read with reference to, and in the light of, the case then before the court. The question in that case was that of the exclusive jurisdiction, or not, of the United States over that part of the reservation not used for military purposes. On the admission of Kansas no reservation of federal jurisdiction was made, but later the State ceded that jurisdiction to the United States with this saving clause, namely: the right to serve civil and criminal State processes therein, and "Saving further to said State the right to tax railroad, bridge and other corporations, their franchises and property on said reservation." The State levied a tax on a railroad on this reservation, and the question of its power to do so depended on whether the reservation was in the exclusive jurisdiction of the United States. The court held that, inasmuch as it was not purchased with the consent of the State "for the erection of forts, magazines, arsenals, dock yards, and other needful buildings," under Clause 17, Section 8, Article I., of the Constitution, the United States had no such exclusive jurisdiction; that, under this saving clause, the State had power to tax the railroad property; and that the only way by which the United States could acquire this exclusive jurisdiction within a State was that provided by the Constitution, namely: by purchase with the consent of the State. The question of concurrent jurisdiction, or of federal jurisdiction for some purposes, was not discussed, nor even mentioned, for it was not involved; nor was any allusion made to that other constitutional provision giving to Congress the power to make needful rules, etc., which certainly gave to Congress much greater power than is possessed by an ordinary proprietor. If the court decided that it did not do so, or did not apply to lands within a State, or decided anything else upon a question of such vast importance, it did so *sub silentio* by saying nothing about it. That is not the way in which that court settles questions of such importance.

From the beginning, the whole policy and practice of the Government, in respect of its public lands, has been based on the generally unquestioned power of Congress to legislate for their disposal, management and protection, in both Territories and States, and with the frequent approval of the Supreme Court. It is needless to refer to these various acts of legislation as to lands in States and Territories. Their name is legion; but, each and every one of these acts was the assertion and the exercise of federal jurisdiction and sovereignty, and of a right far superior to that of any mere proprietor as to lands within a State. This must have been either because, in the admission of the State, the jurisdiction necessary for that purpose was either expressly or impliedly reserved—the latter of which is not probable—or because the constitutional provision referred to confers that power; and this would seem a quite sufficient source of power.

In Gibson v. Choteau (13 Wall., 92) it is said in the syllabus that "The power of Congress, in the disposal of the public domain, can not be interfered with, or its exercise embarrassed by any State legislation." And on page 99, "With respect to the public domain, the Constitution vests in Congress the power of disposition and of making all needful rules and regulations. That power is subject to no limitations." Nothing could be more conclusive that this constitutional provision applies also to lands within a State, and that the legislative power thus conferred is paramount.

In Jorden v. Bennett (4 How., 169) it is said (p. 184) "By the Constitution, Congress is given power to dispose of and make all needful rules and regulations respecting the territory and other property of the United States: for the disposal of the public lands, therefore, in the new States where such lands be, Congress may provide by law; and having the constitutional power to pass the law, it is supreme: so Congress may prohibit and punish trespassers on the public lands. Having the power of disposal and of protection, Congress alone can deal with the title, and no State law, whether of limitation or otherwise, can defeat such title."

This was the holding of the Supreme Court up to the time when the Fort Leavenworth case was decided, and it is not supposable that that Court intended to then overrule these cases and deny this legislative power of Congress, and all other powers save such as belong to an ordinary individual proprietor, while making no reference whatever to its previous holdings. That it did not so intend is manifest from the only other case which I shall cite on this question—that of Camfield v. United States (167 U. S., 518), where it is said in the syllabus:

"The Government of the United States has, with respect to its own lands within the limits of a State, the rights of an ordinary proprietor to maintain its possession and to prosecute trespassers; and may legislate for their protection, though such legislation may involve the exercise of the police power."

On pages 524, 525, the powers of the Government, both as an individual proprietor and as a sovereign are well stated:

"The lands in question are all within the State of Colorado. The Government has, with respect to its own lands, the rights of an ordinary proprietor to maintain its possession and to prosecute trespassers. It may deal with such lands precisely as any private individual may deal with his farming property. It may sell, or withhold them from sale. It may grant them in aid of railways or other public enterprises. It may open them to pre-emption or homestead settlement; but it would be recreant to its duties as trustee for the people of the United States to permit any individual or private corporation to monopolize them for private gain, and thereby practically drive intending settlers from the market."

And on page 525:

"The General Government doubtless has a power over its own property analogous to the police power of the several States, and the extent to which it may go in the exercise of such power is measured by the exigencies of the particular case. If it be found necessary for the protection of the public, or of intending settlers, to forbid all enclosures of public lands, the Government may do so, though the alternate sections of private lands are thereby rendered less valuable for pasturage. The inconvenience, or even damage, to the individual proprietors does not authorize an act which is in its nature a purpresture of Government lands. While we do not undertake to say that Congress has unlimited power to legislate against nuisances within a State which it would have within a Territory, we do not think the admission of a Territory as a State deprives it of the power of legislating for the protection of the public lands, though it may thereby involve the exercise of what is ordinarily known as the police power, as long as such power is directed solely to its own protection. A different rule would place the public domain of the United States completely at the mercy of State legislation."

This, so manifestly the correct doctrine, would seem to cover and to settle the whole question, and to authorize the proposition that, as to public lands within a State, the Government has all the rights of an individual proprietor, supplemented with the power to make and enforce its own laws for the assertion of those rights and for the disposal and full and complete management, control and protection of its lands.

Among these undoubted rights is the right of absolute or partial exclusion, either at all, or at special times, and for any or for special purposes.

While Congress certainly may, by law, prohibit and punish the entry upon, or use of any part of, these forest reserves for the purpose of the killing, capture or pursuit of game, this would not be sufficient. There are many persons now on those reserves by authority of law, and people are expressly authorized to go there, and it would be necessary to go farther and to prohibit the killing, capture or pursuit of game, even though the entry upon the reserve is not for that purpose. But, the right to forbid intrusion for the purpose of killing game is one thing, and the right to forbid and punish the killing, *per se,* and without reference to any trespass on the property, is another. The first may be forbidden as a trespass and for the protection of the property; but when a person is lawfully there, and not a trespasser or intruder, the question is different.

I am decidedly of opinion that Congress may forbid and punish the killing of game on these reserves, no matter if the slayer is lawfully there and is not a trespasser. If Congress may prohibit the use of these reserves for one purpose, it may for another; and while Congress permits persons to be thereupon and use them for various purposes, it may fix limits to such use and occupation and prescribe the purposes and objects for which they shall not be used, as for the killing, capture or pursuit of specified kinds of game. Generally, any private owner may forbid, on his own land, any act that he chooses, although the act may be lawful in itself; and certainly Congress, invested also with legislative power, may do the same thing, just as it may prohibit the sale of intoxicating liquors, though such sale is otherwise lawful.

After considerable attention to the whole subject, I have no hesitation in expressing my opinion that Congress has ample power to forbid and punish any and all kinds of trespass upon, or injury to, the forest reserves, including the trespass of entering upon or using them for the killing, capture or pursuit of game.

The exercise of these powers would not conflict with any State authority. Most of the States have laws forbidding the killing, capture or pursuit of different kinds of game during specified portions of the year. This makes such killing, etc., lawful at other times, but only lawful because not made unlawful. It is lawful only when the State has power to make it lawful, by either implication or direct enactment. But, except in those cases already referred to, such as eminent domain, service of process, etc., no State has power to authorize or make lawful a trespass on private property. So that, though Congress should prohibit such killing, etc., on its own lands, at all seasons of the year, this would not conflict with any State authority or control. That the preservation of game is part of the public policy of those States and for the benefit of their own people is shown by their own legislation, and they can not complain if Congress, on its own lands, goes even farther in that direction than the State, as long as the open season of the State law is not interfered with in any place where such law is paramount.

It has always been the policy of the Government to invite and induce the purchase and settlement of its public lands; and as the existence of game thereon and in their localities adds to the desirability of the lands, and is a well known inducement to their purchase, it may well be considered whether, for this purpose alone, and without reference to the protection of the lands from trespass, Congress may not, on its own lands, prohibit the killing of such game.

Your other questions relate to the method of enforcing these federal powers, if they exist—to the nature and kind of laws therefor. While such questions are peculiarly for Congress, yet, as you request it, I will suggest what occurs to me.

You very properly suggest the power of Congress over interstate commerce as tending indirectly to this end, by prohibiting interstate transportation of game, living or dead, or of the skins or any part thereof. There is some legislation on that subject. I do not take the pains to examine this to see how sufficient it is. If not already done, something to the end desired may be accomplished in this way; but, as a remedy, this would fall far short of what is required.

You allude to the aid and co-operation of forest rangers and those in charge, for the enforcement of State laws. This would be well; especially in the way of securing good feeling and harmonious action between federal and State authorities. There is a provision for that in the Act of March 3, 1899 (2 Sup. Rev. Stat., 993), but it simply imposes a general duty, and should be more specific as to what acts are required to be done.

In this connection, and with reference also to the general protection of these reserves and the other public lands from fires, cutting timber, killing game, and other depredations, I suggest, in view of the existing law as to arrest without a warrant, that it might be well to give marshals and their deputies, and the superintendents, supervisors, rangers and other persons charged with the protection of these reserves, power, on the public lands, in certain cases approaching "hot pursuit," to arrest without warrant. Complaints come to this Department that very often the place of illegal acts is so far from the office of any magistrate, and the means of communication are such that, before formal complaint can be made and an officer with a warrant sent there, the offenders are beyond successful pursuit. I commend this to your consideration. No matter what laws we may have for the protection of these reserves, the public lands generally, or the game, they are in many cases wholly inefficient, owing to the impossibility, under the present law as to arrests, of their enforcement.

There are already many statutes against setting fires, and trespassing on the public lands. Perhaps these are sufficient, as far as laws go. I do not examine this; but, as to the protection of game on forest reserves, drastic laws for that purpose, together with better means, as above suggested, for their enforcement, are required.

I suggest making it an offense to enter or be upon or use any portion of a forest reserve for the purpose or with the intent to kill, capture or pursue certain specified kinds of game; or to kill, capture, or pursue, with intent to kill or capture, such game, on any portion of such reserve. I should do this for the whole year as to some kinds of game, at least, and make such killing, capture or pursuit the evidence of such purpose or intent. The latter clause, as you will see, proceeds against the act itself, irrespective of any trespass on the lands, if, indeed, such act does not necessarily involve a technical legal trespass. This may be questionable in case, for example, when one who is properly there, kills game. I should insert it, at any rate, and it would, with the other, operate as a preventive.

Respectfully,
P. C. Knox,
Attorney-General.

THE PREDICAMENTS OF A POET.

CHARLES N. DOUGLAS.

His lady's locks of Titian red inflamed the poet's soul,
And soon with frenzy fine, and wrapt, his eye began to roll.
He hied him home and seized his lyre, and gaily twanged and smote,
And then a matchless sonnet to those ruddy locks he wrote.
Then with his poesy to his love he straightway hurried back.
But oh! ye Gods! that Titian hair was now a raven black.

Homeward in haste the poet hied, there was no time to lose;
And soared Parnassan heights afresh, and wooed anew his muse.
And forthwith then he grabbed his lyre and smote it many a smack;
Then wrote his lays in frenzied praise of tresses raven black.
Then, with his sonnet sought his love, alas, poor hapless clown!
The fashions they had changed, and now his lady's locks were brown.

The poet tarried not, nor wept, but hastened home full swift,
And in the praise of nut brown hair his voice right soon did lift;
And on the parchment glowing words of eloquence express
The poet's adoration of each silken, glossy tress.
Then rushed unto his lady love, in horror to behold
That nut brown hair that once was there was now peroxide gold.

MORAL.

While fashion sways the sex called fair
It would be wise, mayhap,
In writing sonnets to their hair
To keep all hues on tap.

"Do yez keep an assistant to the cook?"

"Yes."

"And do be the assistant have a helper?"

"She has."

"And have yez a kitchen maid to clane up after the assistant's helper?"

"We have."

"Well, I'll give yez a week's trial."—Brooklyn Life.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman

FOR AND AGAINST BIRD DOGS.

I think A. A. W., Glade Mills, Pa., expressed a most sensible opinion as to the cause of the decrease of game birds. Kill off the bird dogs, as well as the hounds. Stop using dogs for any kind of hunting. A man who uses a bird dog is just as bad as the one who hounds deer. I have a few hounds, but under no circumstances have I ever allowed them to chase deer. My hounds will never be used for anything but bear, cats, coyotes and such game.

There is no good sportsman in these parts who uses a dog, and there is only one trained bird dog within 40 miles of here. Yet we get good bags, and rarely make hogs of ourselves. A dog should not be used for any kind of hunting, save, possibly, for bear. Those animals can hardly be secured without a trap or a pack, and are about the only game one can use a dog on and remain a sportsman. No one can give a good reason why the use of dogs should not be forbidden in any kind of shooting. If Jones or Smith can use dogs in hunting quail, then I maintain that I can hound deer without violating any rule of sportsmanship.

Mr. Editor, the only excuse I know of your ever having made for the man with the bird dog is this: The pleasure of seeing a well trained dog work and the securing of wounded birds that would otherwise get away and eventually die. Did you ever see as many, or as large a percentage, of birds escape crippled as you have seen crippled deer? I think not. A deer is a much larger mark, but what a number are crippled instead of killed. The party of 4 I hunted with last fall killed 4 deer and crippled 3. Had dogs been used to follow those cripples, 2 of them would probably have been secured.

Every argument that can be made in favor of using a dog on birds can be made with just as much force for its use, properly trained, for deer. I wish it distinctly understood, though, that I am entirely opposed to hounding deer. I am opposed to the use of a dog for any kind of hunting.

B. L. Cunningham, Fort Klamath, Ore.

I notice that A. A. W., of Glade Mills, Pa., thinks the extermination of birds is due to the use of dogs in hunting them. He compares the hounding of deer and their slaughter to the work of setters and pointers on birds. I think he is wrong. Twenty-five years ago, in my native town, Tolland, Mass., birds were plentiful and tame; to-day they are plentiful but exceedingly wild. Formerly hunting dogs were unknown; now they are numerous. I belong to a club of 40 members, which controls the hunting and fishing over 3,000 acres in that town. Every member owns a dog and some own 2 or 3. The birds have learned to associate the appearance of a dog in the brush with the crack of a gun, and as a result the hunter who gets 3 or 4 grouse in a day is exceedingly fortunate.

Foxes and other vermin kill 50 birds to one killed by the gun. Put a bounty on foxes, skunks, hawks and owls; limit the game bag and forbid the sale of game and birds will increase instead of diminishing. It is the market hunter who does most mischief. When he can not sell his birds his occupation is gone and he gives up shooting. If a law is passed forbidding the use of dogs to hunt birds I am ready to give up shooting. It is the intelligence manifested by my dog that I enjoy far more than the killing of a bird.

Keep up the good work you are doing and your friends will become numberless as the results of your labors become better known. H. A. Pratt, N. Y. City.

A. A. W., Glade Mills, Pa., has a level head. It is a fact that if there were fewer bird hogs with their bird dogs there would be more birds. As long as dogs are used in hunting, game can not increase. There are not less than 20 bird dogs in this little place, and not many more birds, where once grouse and quails were abundant. Away with the dogs, or put a tax of $10 on each one and use the money to restock our woods and fields.

T. U. M., Tecumseh, Mich.

KILL THE FARMER'S BEST FRIENDS.

A writer in a paper published in Southern California says:

"Kill them!"

"Kill what?"

"Oh, the horned toads! They are the only thing we have that destroys the red ants with their agonizing sting, and prevents them from multiplying into innumerable millions. So, if you can not sell the toads for a nickel apiece, to be mounted and sent East as curios, just set your heel on them when you see them.

And there are the gopher snakes; slow, harmless fellows. Watch one work for an hour or 2. See him crawl into every gopher hole there is in your measly little orchard, and, after swallowing all the young gophers he can find, watch him turn his attention to the rat holes on the edge of the wheat field. He minds his own business, and attends strictly to it. What! tired of watching him? Well, then, kill him just because he is a snake, instead of a blear-eyed, pampered poodle that you have to feed on sponge cake, just for the few fleas you can get off from him.

"Then there are the birds. Here we have a pair of sweet voiced meadow larks; they stand confidingly close to the edge of the road. Get your gun! Shot gun or rifle, it matters not which and wantonly butcher them lest they escape and destroy 100 times their weight in cutworms. Shoot the pretty, waggish roadrunners. They feed on scorpions and centipedes, and prevent their becoming a menace and making life a burden to man. But, then, the idle Sunday loafer, with his death-dealing 22 rifle, must be amused. Shoot the *tucalotos,* the pretty little ground owl that politely bobs good morning to you. Shoot them! Even though a man of veracity on the Chino ranch claims to have found 17 gophers, old and young, in the nest of a family of *tucalotos.* They are too good to live; too innocent and self sustaining. Shoot them!

"Shoot the hawks; the little kites, or sparrow hawks. Of course they live on the mischievious linnets; but that does not matter.

"Shoot the hen hawks! In this country they live on mice, rats and rabbits, but there is a legend from the East that they sometimes eat chickens. So be sure to shoot them; they make such a fine target.

"Shoot the best friends of the rancher, the coyotes. It is true they take a chicken now and then; but don't you know it requires 3,000 pounds weight—1½ tons—of rabbits, rats, gophers and the worst pests that the ranchers have to contend with to feed one of these wild, self-supporting dogs until he is a year old? While your 3 or 4 lazy house dogs have eaten the price of 100 hens and sucked all the eggs they could find. These are necessary to bark at night and impress all your visitors with the need of going armed; but shoot the coyotes.

"There is another class of brutes that really ought to be shot. Take them far out on the desert, for they are not worth burying. They are the thoughtless, heedless shooters who are indiscriminately killing and crippling the best friends that the farmer and the orchardist has in California."

SPARE THE GREY SQUIRREL.

Why shoot the grey squirrel? The world is wide enough for both him and you. His flesh is not good. No man or boy able to own or borrow a gun can need the flesh of this creature as hunger-satisfying food. The idea is ridiculous; and there is not enough sport in so tame a pastime as squirrel shooting to justify the killing of a creature which, if left alive and protected, speedily becomes the farmer's intimate friend.

Thirty years ago, in the dark ages of American sport, squirrel shooting attracted many men with guns. In those days, gunners roamed at will through field and woods to slay; but today thousands of American farmers are protecting their squirrels. I know of farms in New York, Michigan and Indiana whereon the squirrels are protected, even at the point of a naked revolver when it becomes necessary. I believe in squirrel protection on just that basis.

The grey squirrel is one of the most interesting, beautiful and sociable creatures that a farm or forest or city park can possibly have. Any person whose soul is not appealed to by the beauty of grey squirrels wild in their haunts is "fit for treason, stratagem and spoils." But there are creatures called men, in whom the finer qualities of manhood are so dormant that they take delight in hunting squirrels in the unimproved and unprotected parks of New York City. They are the men who cut park timber in the night, rob hen roosts and steal doormats and slop pails. Boys, do not join the class of these human vermin.

Squirrels are not good food. I know of no other civilized country than America in which they are eaten. An Englishman would as soon eat a rat as a squirrel. They are exactly on a par with woodchucks and prairie dogs. The taste of squirrel flesh is rankly "game" and to many persons it is unendurable. The value of a living wild grey squirrel is to a dead one as five hundred is to one. Don't destroy them! Protect them and enjoy them!

W. T. Hornaday, New York City.

I should be sorry to see even the grizzly bear actually exterminated, although it is undoubtedly a dangerous animal; but I think it will be little short of a national calamity if we do not save from extirpation such a harmless and beautiful creature as our grey squirrel. There are just as many good reasons for having tame grey squirrels in our city parks as there are for having beautiful pictures in our city galleries.

Ernest T. Seton, New York City.

HOW TO HUNT GREY SQUIRRELS.

In a previous number of RECREATION there is an inquiry as to the best method of hunting grey squirrels where they are scarce. The following method might be adopted as the only decent one:

Arise early in the morning, go into some thick grove of oak, beech or chestnut, where squirrels are occasionally seen, and await their coming. Have as weapon one Eastman Kodak with rapid rectilinear lens and Eastman triple action pneumatic shutter; and for a load a No. 4 cartridge is about the proper thing. Any person adopting this method will have better luck and more real sport in 2 hours than if he goes into the woods for all day armed with a more deadly weapon, destroying the lives of every grouse and squirrel he can, and comes home and boasts of being a mighty Nimrod, better known to readers of RECREATION as a game hog. I have frequently heard people say it is impossible to be a game hog in Vermont. That is not true. As game is scarce here it is not necessary to make so large a kill in order to be branded G. H. as black and deep as where game is more abundant. C. C. Manley,

L. A. S. Local Warden, Chittenden, Co., Vt.

ANSWER.

You are correct as to your method of hunting grey squirrels, and it is the only way that any man or boy should ever adopt. Fortunately there is no close season on this kind of hunting, and the more people do of it the better. I offer one amendment. Bait the squirrels with corn or nuts in an open place, every day for several weeks, or even months. If you will do this you will find that certain of them will learn to go every day to get their rations. When you have once induced them to visit their boarding house regularly, set up your camera, focus it on that spot, attach a long hose, take the bulb in your hand, hide behind a bush or log and wait for the visitors. When one comes press the bulb and the camera will do the rest.

In this way any man or boy who has a camera may secure a trophy that would be worth more to him than 100 dead squirrels would be, and he can look at it and show it to his friends with a clear conscience; whereas no man should be able to look on a squirrel he has killed without feeling ashamed of himself.—EDITOR.

A PROPOSED GAME PRESERVE.

It need not surprise Woodstock's visitors to see in the future a game preserve of 1,800 acres or more within easy distance of the village, and in it all kinds of game adaptable to the Vermont climate. A large tract has been selected in the Southwest corner of the town, 7 miles from Woodstock and 2 from Bridgewater. It is already stocked with fish and game. Three trout brooks run through it. It is believed the enterprise will interest people with means to push it through, as Dearborn & Co. make a liberal offer of 300 acres of land, including 7 mowing fields, and buildings suitable for the caretakers of the park, at $2 an acre—just what it cost them. They will also sell some 1,500 acres adjoining, of which they have the sale, at what they can buy for, without any commission; much of it at $1 an acre, comprising pasture and woodland; no buildings or highways to buy up.—Woodstock (Vt.) paper.

The above clipping outlines a scheme in which I hope to interest brother sportsmen. Nature and location have combined to make an ideal game park of the land in question. It is a block of abandoned farms, as the still blooming rose and lilac bushes testify. The old orchards are still in bearing and wild deer feed on the apples. Twenty-five years ago these hills were covered with sheep, but the great decline in wool put an end to that industry. Since then the land has been permitted to grow up wild. Besides the original forests there are plenty of young spruce, hemlock and shrubbery.

Adjoining these 1,800 acres are 2,000 more that can be bought for $1 an acre, making a park containing 4,000 acres. Enough deer could be enclosed with it to stock it thoroughly. Deer were protected in this State nearly 30 years, and are now abundant in Windsor and Rutland counties. This land is almost in the heart of the deer country.

I have no dull ax, being interested in the matter only as a sportsman who has known the region from boyhood. I hope a sufficient number of sportsmen may be attracted to this favored spot to make the plan a success. I cheerfully vouch for Dearborn & Co., of Woodstock. They are truthful and honest people, and will answer all letters cheerfully.

J. H. Hoadley, South Woodstock, Vt.

CHILDREN READ RECREATION.

One of the great problems confronting lovers of game animals is their protection from the bloodthirsty men whose only desire is to kill all they can. One thing is certain: Our hopes can be realized only through popular education. To help in this work I have 2 suggestions to make:

I notice that nearly all children enjoy RECREATION. Even my tots, too small to read, will look through my copies repeatedly. Let each reader of this magazine call his children's attention to the teachings of RECREATION. It is an enemy to game hogs, and a manual of mercy to game. I feel sure no child could grow up a slaughterer under such training.

Let the friends of game protection strive to secure as subscribers the principal hunters of our communities. RECREATION should go into the hands of boys and young hunters. Would it not be a demonstration of our sincerity along this line to spend a few dollars if need be in putting RECREATION into the hands of some of the young? Mr. Shields' work is an unselfish one. Let us help him.

F. S. O., Mexico City, Mo.

BABCOCK AND HIS HERD AT IT AGAIN.

The guests of E. S. Babcock returned yesterday from one of the best of the season's meetings at Otay. Lined on the lake 13 in number, the shooters closed in on the game, which possibly outnumbered to the area that of any other place in the world, and when the birds attempted to take flight the shooting began. Exactly 1,878 birds were killed on Monday morning, several of the hunters making excellent records. The following named participated in Monday's shoot: Mr. Lipop, U. S. A.; Mr. Dillon, Los Angeles; Frank Ecker, W. L. Tibbals, Dr. Edwards, Dr. Parsons, F. M. Doak, T. A. Johnson, Mr. Flynn, of Los Angeles; F. B. Naylor Geo. Benson, and C. P. Douglas.

In the afternoon Mr. Babcock extended the courtesy to Dr. Walcott and his party, who had driven over to inspect the Otay dam. Mr. Walcott, Mr. Wilson and Mr. Lippincott availed themselves of the opportunity for a small sized duck hunt, and brought down 90 ducks in an hour, after which they took a turn at fishing, having to their credit 70 bass in a short period. San Diego, (Cal.) *Union.*

And the California papers continue to record the slaughter done by these vulgar brutes as they would the doings of decent people in any good work. Verily, there are some so-called educators who are sorely in need of education.—EDITOR.

GAME NOTES.

Some time ago you recommended E. E. Van Dyke to me as a guide on a trip which I contemplated taking, and you asked me to report my success. While with Mr. Van Dyke I killed 2 silvertips, one black bear, one 7-point bull elk, a large mountain sheep, a lynx and plenty of feathered game. I could have killed deer and other large game but I, as well as Mr. Van Dyke, thought we would better leave them for next year. I saw one large bull moose on a lake, took a shot on the run, but did not get him. The trout fishing beat anything I ever saw. I caught a number that weighed 3½ to 4 pounds each. I could have caught 150 pounds a day with a fly if I had wished. Mr. Van Dyke is a gentleman, a first class guide and hunter. He gave me the best time and most game I ever had on any trip, either in this country or in Europe.

Ed De Temple, Chicago, Ill.

I am of opinion that the game law as at present constituted is unjust to sportsmen in the Northern portion of Minnesota. Uniform game laws in a State over 300 miles in extent North and South must be unfair in some portions of it. We are not permitted by the present law to shoot plover until September 1st. The plover arrive here early in August and are gone entirely by the last of that month. Hence we get no shooting at all on plover. Our prairie chickens are full grown by August 20th, and the season is practically over by the middle of October. We should be given at least a week the advantage of sportsmen in the lower part of the State. Make the season on chickens August 20th to October 20th, instead of September 1st to November 1st; likewise on all game birds up here.

Lewis B. Franklin, Hallock, Minn.

We recently had an unfortunate occurence on our road, which I think worthy of note. One morning while our log train was on its way to the woods with 30 flat cars and a coach, the engineer saw a large doe running toward the track. When she reached it she attempted to jump over one of the flat cars, and would have succeeded had she not chosen the one nearest the coach. The train was moving rapidly, and, as a result, the doe struck the coach with such force as to kill her and smash several windows in the car. A man in the coach, thinking there was a wreck, jumped off the back platform and landed on the dead doe. When picked up he said he thought he killed the deer by falling on her.

Deer are still numerous here, though some men persist in hounding and in shooting them in close season.

W. M. Kummer, Au Sable, Mich.

For a camping trip, I like bacon, prepared pancake flour and what is known as Swede bread, coffee, sugar, salt, pepper, and some canned goods. It all depends on whether you are carrying your own goods or have a burro, canoe, or other means of transportation. Swede bread is made of ordinary dough, rolled thin, punched full of holes with a fork and baked in large sheets. It will keep a long time, and is much better than hard tack.

A frying pan, a coffee pot, a large long-handled stew pan with a cover, and spoons make up the outfit. You can bake in the stew pan. Sleep with your side toward the fire, and don't make the mistake of making too big a one. Cooking can be done better over the coals than over the flame. W. R. Jackson, Pasadena, Cal.

Am glad to say that gull shooting has entirely ceased here. All game buyers have received orders to stop taking even the few gulls the duck shooters were bringing in. No one has followed gull shooting as a business since last summer, but now and again a man would bring in a gull or 2 and sell them. Now even that has been stopped. We are, I understand, to have a general overhauling of our laws and a determined effort will be made to stop battery shooting and shooting from sail boats. That will not touch the spot at all. The market is the thing to close. There are a few ducks about, but all are educated. They sit in the ocean all day and come in the sound at night to feed; so but few are killed. A. S. Doane, Waterlily, N. C.

For 3 years I have made a standing offer of $10 for information that would lead to the conviction of any violator of the game laws. One day last winter I sent my nephew, Earl M. Brooks, out in the country to see a certain farmer and get him to help catch some fellows who were shooting chickens and quails on the snow. He caught the farmer himself and a neighbor with 4 quails they had potted. It cost them $10 and trimmings, and should have cost them more. Now I am surrounded by a ring of squealing game hogs, who think it "too bad to prosecute innocent farmers, when others are breaking the law." I will get some more of them yet, and shall consider it cheap at $10 a shot.

A. L. Brooks, M.D., Audubon, Ia.

I have just returned from Newfoundland, where I enjoyed caribou shooting beyond anything I expected, and I attribute my success largely to the good advice given me by you. George Nichols was our guide, and he was all one could ask for in that capacity. The trip was a success in every respect, and it will be remembered in years to come with pleasure greater than any other I have taken. I secured 2 fine stags almost on the same spot where you shot yours. The largest number of caribou sighted in one day was 64 and the smallest 7. We were in camp 8 days. Left home October 12th, and returned November 4th. C. W. Winspeor, of Newark, N. Y., accompanied me.

G. J. Van Vachten, Oneonta, N. Y.

Have just received my first copy of Recreation. It seems to me a magazine of the right sort for sportsmen. I wish we had a similar publication in Canada. Our game is being rapidly exterminated by Indians, who kill all they can, and by so-called sportsmen, who can not distinguish a doe from a buck. This being an unorganized district the law can not punish anybody killing game out of season, as was proved last year when a constable ran in some men and was hauled over the coals by the authorities for so doing. Owing to that a petition has been sent to Victoria, and I hope we shall obtain protection. If not, we shall have to go far away for our sport in the future.

J. F. Campbell, Pentichin, B. C.

As Mr. Geo. Severance was returning home one day last winter he discovered a dead grouse by the roadside. He got out of his sleigh and picked up the bird. Its head had been severed from the body as neatly as if by a knife, and the body was still warm. Mr. Severance at once began an investigation. Nearly 20 rods from where the bird lay he saw, clinging to a telephone wire a little tuft of feathers, and directly beneath lay the head of the grouse. The bird had evidently been crossing the road in swift flight, possibly to escape from a hawk, and striking the wire had decapitated itself, while the body passed on by its own momentum.

E. G. Moulton, Derby, Vt.

I am sorry to see the public persistently misinformed by the Tacoma Ledger regarding elk in the Olympic mountains. On the Western slope of that range elk are steadily increasing. The rangers have kept Indians out of the forest reserve, and game hogs find the hunting there too hard to suit them. I saw a band of elk last fall and counted 44 head, and there were more in the brush. A band of over 100 were seen on Queets river last spring. Deer are abundant in spite of numerous wildcats and cougars that prey on them. Grouse are not plentiful; cats and hawks keep them thinned out.

Geo. Y. Hibberd, Queets, Wash.

I have a fine silver tip bear hide, Indian tanned and nicely stretched. I wish to make a rug of it, and wish you would tell me how to prepare the head and soften the hide. A .R., Louisiana, Mo.

ANSWER.

That is a job for a taxidermist or a fur dresser, and I would not advise you to undertake it yourself. It would take any man a year or more to learn to do such work in a creditable way. I therefore advise you to send it to any taxidermist who advertises in Recreation. You would then get a good job.—Editor.

I spent 3 months last fall in camp at Kickapoo Springs, Texas, about 40 miles from Brackettville. Though I hunted every day, and saw plenty of deer, turkeys, quails and ducks, I killed only enough game to supply the camp with meat. Al Wallis, a hunter and trapper living in Edwards county, killed 116 deer last season and sold the hides to Roach & Peterson, of Brackettville. In killing those deer he probably wounded half as many more. He has practically exterminated the game of a region which a few years ago abounded with deer and turkeys.

L. Lehman, Fort Douglas, Utah.

One day last winter a doe ran through the streets of this city, finally dashing through a door into a shop. There she fell either from exhaustion or fright. Some men secured her, put her in a wagon, carried her 2 miles from town to a spot where deer had been seen, and there let her go.

E. M. R., Concord, N. H.

Those men should be voted a pension of $25 a month for the remainder of their lives. There are few such men living. The average unthinking mortal would have killed the doe and hung her up in the back yard or cellar.—EDITOR.

Please explain how a birch bark canoe is made. Reader, Sandy Creek, N. Y.

ANSWER.

I do not think anybody can tell you how to make a birch bark canoe. You would have to see one made, and there are but few white men who make them. It would probably be necessary for you to go to Wisconsin or Michigan and see the Indians make their canoes. The Indians in Maine used to make them, but there are practically no birch trees there now that are large enough, and there are only a few in Michigan and Wisconsin.—EDITOR.

I saw in RECREATION an inquiry as to whether there are any mountain sheep, or big horns, on the Pacific slope. We have them on the coast of Alaska, the same as the Rocky Mountain sheep, only white in color. I have guided 3 hunting parties from England and one from Chicago, and all got a good number of specimens. Besides moose and bear, there are plenty of sheep here within 40 miles of salt water. We often get moose and bear on the beach of the inlet.

Wm. Hunter, Kenai, Alaska.

Some readers of RECREATION think quails ought to be protected for 5 years. I think they should be protected 500 years. There is a flock of 18 or 20 birds near my home, and all through the cold weather they fed at our corn crib and around the house. I shot 4 of them early in the season and then let them go, and am not going to shoot any more. We have good pointer dogs and shoot a few chickens in the fall. There is a fair number of them now, though they had been scarce 5 or 6 years.

T. Y. Shear, Thawville, Ill.

I have been in this country nearly 8 years. Game hogs, firebugs, fish hogs and timber thieves have materially lowered the price of real estate. Six years ago I saw a train of wagons coming from the Priest lake country. The snow was about a foot deep. "What luck?" I asked. "Oh, pretty good. We got 213 deer and 5 caribou," was the answer. "Yes," he added, "the dogs ran as many more that we didn't get. Most of them went over the divide."

S. G. M., Rathdrum, Idaho.

In a recent number of RECREATION E. M. B., Lead, S. Dak., accuses the soldiers at Fort Meade of slaughtering game, and calls them shoats. During my service at Fort Meade in the hunting season of '98 I saw nothing unsportsmanlike in the conduct of the men. I have always found soldiers good sportsmen, perfectly satisfied with a small quantity of game. Deer were abundant here last fall and could be found within half a mile of the post.

Dr. C. E. Macdonald, U. S. A.,
Fort Yates, N. D.

There are many people here who have no regard for the game laws. Recently a man went out hunting and as he could not hit anything he tried to shoot some meadow larks, but he could not hit them either. Some of the L. A. S. boys got after him and he afterward said he was glad his aim was not true. We are trying hard to get boys to join the League and have succeeded well so far.

James Montgomery, Erie, Pa.

I am much interested in the fight against spring shooting. If we win, ducks will, within a few years, be nesting in this State, as they now do in Canada. It is amazing that ducks have not been exterminated before this when you consider that there is hardly a month in the year when they are not being hunted somewhere on the continent. Stop spring shooting and the sale of game and there will yet be plenty of sport for us all.

Y. F. Close, Middletown, N. Y.

Game is going fast in this country, and unless better protected will soon be gone. Gold Butte is in the sweet grass hills. We have no large game to speak of, but grouse are abundant, and there are a few ducks and geese. The unlawful killing of deer and sheep along the Missouri, between the Yellowstone and Fort Benton, should be looked into. You are doing better work than you think, and the country can never repay you.

Harry Feed, Gold Butte, Mont.

The only way to save our game is to prohibit market shooting entirely. Recently I heard a farmer tell how he was returning from town one evening and saw a flock of quails settling for the night. He drove on home, several miles distant, got his gun, and, returning to the place, fired both barrels at the birds on the ground, killing 21. He certainly would not have gone to the trouble had he not known he could sell the quails.

X, Hartford, Conn.

Owing to general observance of the game laws game is becoming more plentiful here. Quails were numerous last fall, and but for the unusually cold winter they would have been abundant this year. Rabbits threaten to become a nuisance in the near future.

I should like to correspond with RECREATION readers in Western Oregon and Washington relative to hunting and farming opportunities in that region.

F. B. Barber, Colebrook, O.

Black, brown and grizzly bears are fairly plentiful here. Our brown and grizzly bears are unusually large. I have seen one hide that measured 6½x11 feet. Deer are abundant, but will not long remain so unless game laws are enacted for this Territory. Ducks are numerous, especially mallard, teal, widgeon, spoonbill, scaup and golden-eye. All are so wild, however, that 10 or 12 is considered a large bag.

W. W. Goldstein, Juneau, Alaska.

We had good redhead and brant shooting at Chincoteague last season; also a good flight of snipe, which seem on the increase. Plenty of quails were left over. In November we had the best flight of woodcock known in many years. Our game association is doing good work through our wardens. We need a nonresident license law. Can not you help us get it?

Henry E. Byrd, Temperanceville, Va.

I seldom miss the open season for deer. There were 3 men in our party last November. We hunted in Schoolcraft county, Michigan. Deer were plentiful, but extremely hard to locate, owing to the carpet of dry leaves in the forest. We were successful in getting one deer each, and a peculiar feature was that they were all yearling bucks, so you may class us as "short horns." A. A. Divine, Elk Rapids, Mich.

Chickens, quails and squirrels are fairly plentiful here. Foxes and wolves keep rabbits from becoming numerous. Game hogs and pot hunters have things their own way. Ducks are abundant. The Rice Pond Club has a great tract of fenced land on which they feed ducks 5 days a week and slaughter them the other 2. One member killed $1,700 worth of ducks last fall.

C. E. Hinch, Washburn, Ill.

Prairie chickens and quails were plentiful here last fall. Though a great deal of market hunting was done during the open season, birds are to be found in large number now. There is some talk of a 5 year law in this State. If such a law shall be passed there will be a good prospect for abundance of chickens and quails in this part of the State for years to come.

Geo. N. Nellis, Dannebrog, Neb.

In my opinion RECREATION is the best sportsmen's magazine published. I approve the stand you have taken for game protection and the manner in which you deal with game hogs. That class of people can not be too harshly dealt with. As they have no sympathy for the game they so ruthlessly slaughter, no sympathy should be shown them.

Dr. C. B. Corson, Renova, Pa.

There was but little illegal hunting in this vicinity last winter. A few deer were brought here from Pasaconaway and sold surreptitiously; but the hounds that formerly chased our deer have disappeared. The dogs went into the woods and stayed there. A number were found with holes in vital parts of their anatomy, which may have been made by rifle bullets.

H. N. Chase, Conway, N. H.

The Supreme Court in denying the application for a writ of habeas corpus in the test case of John F. Corriea, has affirmed the constitutionality of that section of the new game law known as the "bag limit," which prohibits any person from having in his possession more than 50 ducks or doves, or 25 quails in any one calendar day during the open season.—California Paper.

We have rabbits, squirrels, prairie chickens and a few ducks and grouse. Two wolves were shot here last spring after they had killed a number of lambs. Rabbits are becoming scarce because so many of our people use ferrits.

W. P. Hollister, Dodges Corners, Wis.

I enjoy trout fishing and shooting. We have lots of both in this Northern part of Ontario. I admire the way RECREATION criticises those over zealous sportsmen who slaughter game. V. C. Marshall,
Owen Sound, Ont., Can.

Deer, grouse and chickens are plentiful here. Antelope are becoming scarce. Beavers are getting so numerous that they interfere with irrigation by damming creeks and ditches. F. W., Big Elk, Mont.

Farmers here tell me that prairie chickens are as plentiful as blackbirds, so we may expect good shooting. The law will be more rigidly enforced.

L. Shannon, Audubon, Minn.

The game in this and adjoining counties consists of a few rabbits and squirrels. A good shot seldom secures more than 5 rabbits in a day.

James Jones, South Bethlehem, Pa.

I was out several times last summer looking to see how the quails were getting on. We are going to have a large crop.
R. H. McCoy, Cornwall-on-Hudson, N. Y.

THE NORTH DAKOTA HERD.

Following are the opinions of some RECREATION readers regarding the North Dakota fish hogs:

Calno, N. J.

Editor RECREATION:

December RECREATION is the best copy of a sportman's periodical I have ever seen. It is rich all the way through.

I congratulate you on making the North Dakota herd of fish pigs squeal. Their photo in November RECREATION indicates that the State of Minnesota should yoke them before allowing them again to exhibit their greed for destroying the fish of that State. It is a shame and a disgrace to any State to allow its citizens to set the pace and example of destroying game fishes, especially for judges of courts and editors of papers, all men of supposed intelligence, and knowing better. Pennsylvania and New York have suffered from the robbing of their waters and woods of their fish and game, and men like you are only warning the people of the newer States, whose game is yet abundant, to beware of fish and game destroyers. These swine rob the State of its most valuable public property, and remove from all hope of restoration to future generations a reasonable share of sport on the waters and in the forests of the country. You have not libelled the Grand Forks squealers. They branded themselves when they called in the photographer to make an indelible impression and a souvenir of their butchery. Was this not a public admission that they were the actors? If there is a law against repeating in print the truth, as depicted in photographs, will Mr. Ledru Guthrie kindly point it out? The photo of the North Dakota herd showed a wanton case of vandalism, greed and destructiveness, and the whole world should know it so they may condemn it. I have talked to over 50 men of sound judgment, and put the question to them, showing them the picture of the herd in November RECREATION, and letting them read Ledru Guthrie's letter in the December number. The usual comment was that Mr. Guthrie had placed himself in line with the North Dakota gang when he attacked you. He showed bad form, sense and taste in attempting to take on his own shoulders the burden of the Grand Forks herd, and would improve his character as a lawyer by quitting it.

M. L. Michael.

In reply to your request in December RECREATION, regarding what the readers thought of the drove of peccaries photographed in the November number, page 360, I would say if they really made that catch in the time stated, they are even worse than you pronounced them, and ought to be advertised thoroughly, so innocent sportsmen might know them when they meet, and show them the special kind of attention due their peculiar breed. You did not roast them half enough. Turn them over and scorch the other side a deep, rich brown.

Stephen Harley, Scottville, Mich.

The December issue of RECREATION is at hand, and a fine number. Your exposure of the North Dakota fish hogs was highly commendable, and should receive the hearty support of every sportsman who believes in fair play and in practicing moderation. Because a man may be highly connected in the business or social world is no reason why he should root out the last potato or appropriate the last fish. I hope you will continue to roast all such "gezers" brown.

J. A. Newton, Grand Rapids, Mich.

WHY CREELS ARE EMPTY.

Brooklyn, N. Y.

Editor RECREATION:

Being an L. A. S. member, it gives me pleasure to note the manner in which you dealt with Messrs. Bohn and Morrell, of Spring Valley and Nyack, respectively. I have fished Rockland lake, and so have many of my brother sportsmen, and I have come away with empty creels more times than otherwise. Mr. Morrell says it was considered, for Rockland lake, a good catch of bass. It might be so considered, had he been using a seine. If such depletion continues, brother sportsmen, we may look for emptier creels in future. One 4 pound fish to each man would be considered good; and 2 each of those 4 pounders would have sufficed for any sportsman, even with a large family. In a 64 page booklet entitled "Fishing on the Picturesque Erie" was published a synopsis of "Laws Relating to Fishing in New York, New Jersey and Pennsylvania," of which Section 110 relates to the legal season for catching bass, while Section 111 relates to length and number of bass per person. The following is a copy of Sec. 111: "No black bass less than 10 inches in length shall be intentionally taken from any of the waters of this State, nor possessed; and in case any such fish is caught or taken, the person taking it shall immediately return it to the waters from which it was taken, without unnecessary injury. No person shall take, catch, kill or possess more than 24 black bass of the size permitted by this article in any one day. Where 2 or more persons are fishing or angling from the same boat, the aggregate number of bass taken, caught, killed or possessed by the occupants of said boat in any one day shall not exceed 36."

No person shall take, catch kill or possess more than 24 black bass of the size permitted by this article in any one day. Where 2 or more persons are fishing or angling from the same boat, the aggregate number of bass taken, caught, killed or possessed, by the occupants of said boat in any one day, shall not exceed 36."

A friend of mine having occasion to show this section to a party of 4 bristlers, states that they withdrew a pace and seemed to be computing among themselves. After putting off in his boat, he was surprised to see 4 boats take to the water, each containing ¼ of the aforementioned party, each intent on taking if possible his legal quota of 24 fish. My friend said, "Fortunately for the fish and some other sportsmen, there was 'nothin' doin'.' Had they all gone in one boat 36 fish would have been the limit allowed them by law. Had they gone in parties of 2 the catch could have been 72 fish; but by the 4-boat game a grand total of 96 might be taken and still the men would not have infringed." Their motto was "whole hog or none," but there was "nothin' doin'." Dame Nature dispenses as she sees fit, and like some others of the gentler sex, she will have her own way; to which I say God bless them all. The bristlers' object was to stretch the law to the full limit; but they were defeated.

Hawthorne.

MR. KIRKBRIDE PROTESTS.

I read an article in January RECREATION stating that A. Wilson and I caught 150 black bass, 137 rock bass, and any number of perch at Lewiston reservoir. I am the only Charles Kirkbride in this city and I write this as a denial of everything contained in that article. I wish you to retract it. I have never fished in Lewiston reservoir, and in all the fishing I have ever done I have not caught one third that number of fish, the sum total of all my catches not exceeding 125 fish. I wish you would say for me that this A. Wilson, whoever he may be, is a dirty, sneaking, contemptible liar, and that he can, if he will make himself known, receive more than this at my hands. Please tell me why you did not ask me if Wilson's statement was true before it was published.

Chas. W. Kirkbride, Findlay, Ohio.

If I should attempt to verify every letter that comes to me, in the way you suggest, I should have to employ at least 10 additional stenographers. That would be an unnecessary expense. When a man writes, as Mr. Wilson did, that a friend and himself did so and so, it is hardly reasonable to expect me to write the friend and ask him whether the other man told the truth. You will see that in this case I doubted the truth of the story and said so in plain English. Still there are thousands of men slaughtering fish and game at as disgraceful a rate as Wilson states in his letter and so I had good reason for printing his statement, and for roasting him and his alleged friend. Inasmuch as you disclaim any knowledge of Wilson you are not damaged by the publication of his report or my comment thereon. I earnestly hope you may find the writer and that you will give him what he deserves. EDITOR.

NOVA SCOTIA SWINE.

A few of us who are subscribers to and admirers of RECREATION feel that you should be made aware of the manner in which fish hogs are slaughtering the trout in this part of the continent. With that end in view I send you clippings from the Telephone and the Telegraph, St. John, N. B. The facts stated therein are, we think, worthy of your able pen. We hope your roasting fork is sharp and the fire hot.

B. R. W., Bear River, N. S.

Following is the item referred to:

R. W. Ambrose, of St. John, is in the city. He has just come from a fishing trip up the Liverpool river, on which he was accompanied by Mr. Snook, of the Klondike hotel, Liverpool, and Mr. Wile, of Bridgewater. They captured over 700 trout.—Halifax Echo.

I wrote these men as to the truth of this report, and received the following answer:

It is true that 2 friends and I caught 700 trout and one salmon in 8 days. I have been going up the same river 15 years and our catch has always been 300 to 700. We do not have to do any bush tramping. We fish from boats in a running river.

A. L. Wile, Bridgewater, N. S.

God must certainly have made that river as a special trough for fish hogs and He must give special care to restocking it each year for their use. Otherwise it would have been barren long ago. I wish all the fish butchers in the world could be banished to that region, in order that decent men might have the other waters to themselves.—EDITOR.

A BLACK LIST.

In compliance with your request I send you a partial list of pot hunters and fish hogs living in this vicinity. The first is Albert Moon, a man over 70. He boasts that he was employed by hide hunters in the West, helped to exterminate the buffalo, and killed hundreds of elk for their hides.

The next is M. G. Ladson. He seldom does a day's work, but spends his time fishing for the markets in the small lakes about here and in trapping. He cares nothing for game or fish laws, and as he has never been disturbed by a game warden he goes out with companions fishing and hunting at all seasons. He claims to have caught 1,500 black bass last year. Wallace Bump, Winfield Plumb, Mart. Goit, Jr., Wm. Norton and Jerry Bird are pot hunters. Charles Wayer is a fish hog. He lives adjoining my farm, and while he does not fish for the market, he and some others have nearly depleted my lake of bass and perch. He wants a peck or so to a mess, and wants it every few days. Isaac Strubler and sons are also pot hunters. It may do some good if you send copies of RECREATION to these men. Your magazine is highly interesting and deserving of the popularity it has attained.

Julien Williams, Waterford, Mich.

A SELF ACCUSED FISH HOG.

The Saturday Evening Post of October 19 contained an article on bass fishing, by J. F. Lawrence, whom the editor mentioned as "a leading capitalist of Chicago, who has made the study of game fish and their proper protection a life work and who holds the American record for having landed the largest small mouth bass." In his article Mr. Lawrence says: "Real sportsmen will willingly obey the laws and seek to promote the protection of game fish against wanton destruction. Most of this comes from pot fishers and those who lack the sportsman's instinct."

In another paragraph Mr. Lawrence says: "My prize day's fishing was in Rice lake, Wisconsin, in company with James Downey. We landed 21 muskalonge, and all big ones, too. In the old days in Gogebic lake, with a companion, I took 163 good black bass in a day. That was fishing!"

No, that's just where you lose the trail, sonny. It was not fishing; it was butchery, pure and simple; and if I were you I would never again prate of "game protection" or of wanton destruction. If ever any man wore bristles, you've got 'em, by virtue of your own boasting.—EDITOR.

TWICE TOO MANY.

Enclosed find clipping from an Illinois paper. The gentlemen (?) referred to live in Hardin, Calhoun county, Ill. I am a regular reader of RECREATION, and I hope to see something warm in the magazine regarding these parties.

D. B., Hardin, Ill.

Following is the item referred to:

Francis Grassman, Morris Fisher, J. T. Linkogle, J. D. Segress and others, caught about 230 fish last Friday in Glead slough.

I wrote these men regarding the truth of this report, and received the following answers:

There were 5 in the party that made the catch; and if our minnows had not given out we would have caught more fish, for the crappies were biting on just the heads of minnows when we quit.

Francis Grassman, Hardin, Ill.

Five of us caught 230 fish, mostly crappies. A few were bass. Hook and line fishing was good last season.

J. D. Segress, Hardin, Ill.

An average of 46 fish to each rod. The fish would doubtless average a pound each or more; so you caught at least twice as many fish as you should.—EDITOR.

NIBBLES.

Not long since, while I was at work near McMurray, Washington, the children of E. B. Caswell, the superintendent, made a dip net of mosquito netting and went to scooping up all the trout they could find. One day they caught about 300 small trout not over 2 inches long. These fish were so small the women would not clean nor cook them, so they were thrown out in front of the house. As soon as I saw what was going on I went to the children's father and told him it would have to be stopped, as I was local game warden and would prosecute him if he let the children use the net any more. He politely told me to go to h—l and prosecute till I got tired; but when I started for a justice of the peace he got down off his car and took the net away from the kids.

A. W. Stratford, Shaver, Cal.

Unlike Mr. Turner, of Munroe, Mass., I think our 6 inch trout law is right. I caught over 200 6 inch trout during the past season. Largest catch, 21. I had to put back a great many, and did not see any die from the hurt. No doubt one occasionally dies, but I don't believe one in 20 does if they are carefully removed from the hook. RECREATION is all right, and a great game protector.

E. C. Hall, Ashfield, Mass.

I have just stocked our streams here with brown trout one year old. There are plenty of quails here; saw a bevy of them in the village.

M. T. Morgan, Nanticoke, N. Y.

As the blackfish wriggled and gasped on the hot seas little Willie remarked, "I'll bet he is sorry he isn't a sunfish just now."
—Exchange.

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

HOW TO CLEAN A MAUSER.

Dayton, O.

Editor RECREATION:

In October RECREATION is an article by J. L. Dodson, of Bethlehem, Pa., with the above title. It should be called How to Ruin a Mauser, as it would be difficult to devise a more certain process for destroying the accuracy of a gun. The emery cuts away the steel, acting most rapidly on the lands. As the emery is never equally distributed on the wiper, and, as it is impossible, by hand, to apply exactly the same amount of friction to every part of the barrel, the result is the production of irregularities in caliber and deformities of the lands. To the unaided eye the barrel looks clean and bright, but the gun will never shoot so well again, and a few repetitions of the cleaning process will completely spoil it. I know a 38-55 rifle which has been so much enlarged by a year's cleaning by a process like Mr. Dodson's, that the bullet now barely touches the lands, and the barrel is fit only for reboring. Never use anything rough, hard or gritty to clean the inside of a rifle barrel. If it needs polishing send it to the factory. If it is leaded clean it with mercury.

All smokeless powders leave the barrel coated with a thin, tough, varnish-like residue. The quantity varies somewhat with the brand of powder. This residue is acid, and, if not removed or neutralized promptly and completely, will surely cause the barrel to rust and become pitted.

To clean a gun use a cleaning rod, some soda solution, oil, gun grease, and clean cloths or their equivalent.

Cleaning rods for 30 or larger caliber rifles are best made of second growth hickory or lancewood. I prefer them with a head with square end and shoulder; the head about ¼ inch long and 1-16 inch less in diameter than the rifle caliber. The slotted wood rods break too easily. For rifles smaller than 30 the rod should be of brass. For home use the brass rod should be in one piece, but jointed rods are more convenient for field use. The latter must be handled with care or they will break at the joints. Brass rods are frequently made with a separable tip and a cylindrical brush to screw in its place. All brass rods should be set in a wooden handle, because if terminated in a ring, as is generally the case with one-piece rods, the rod is likely to strike and nick the edge of the rifling at the muzzle. Any injury to this edge makes bad shooting. Iron cleaning rods ought never to be used. Finally, the rod should always, if possible, be introduced at the breech, and never at the muzzle, on account of the danger of injuring the edge of the rifling at the muzzle. Bristle brushes serve a good purpose in larger caliber rifles using black powder, but are useless when smokeless powders are used. Wire brushes should never be used in rifles.

Cotton wool, tow, jute or any soft cloth may be used for wiping or oiling. I believe canton flannel the best all around cleaning medium. I buy bleached canton flannel, because it will absorb water more readily than the unbleached. I have it thoroughly washed and rinsed to remove any dressing it may contain. When it is thoroughly dry I cut it into squares of such size that one or more, when forced into the rifle with the rod, will make a snug fit. I find the fuzzy side next to the barrel does best work. Keep it stored in a box where it will remain free from dust.

Soda solution, for neutralizing and loosening the residue: Put one pound of sodium carbonate, or washing soda, into a pint bottle, then fill the bottle with rain water, and label it soda solution for cleansing gun barrels.

Have at hand plenty of good non-drying oil; vegetable oils must not be used. I prefer the best grade of machine lubricating oil, such as is used for oiling engines and machinery. It is a paraffin oil or a vaseline that remains fluid at ordinary temperatures. It never gets gummy, and, I think, prevents rust better than animal oils.

Mercurial ointment is useful for applying to inside of clean barrels to prevent rust. Vaseline is much used for that purpose but is no better than the lubricating oil mentioned above.

To clean a gun, take the proper sized cleaning rod, and after wetting one or more squares of canton flannel with the soda solution, and squeezing out the surplus, force repeatedly throughout the length of the barrel. When one square of cloth is soiled take a new one. After thus swabbing the barrel wipe it dry by means of the cleaning rod and dry squares of canton flannel. Then swab with another square saturated with oil. Repeat this until the cloths come out perfectly white after being used. Finish by swabbing with a clean cloth and some mercurial ointment. Use until every part of the inside of the barrel is coated with the ointment. Be careful not to get it on gold, silver, brass or copper articles, for the mercury will combine with those metals and the article will be ruined. Finally, go over the outside of the barrel and all the metal parts of the gun with a lightly oiled soft clean cloth; place the gun in its case to keep off dust and store it in a cool, dry place.

A gun should be looked over and oiled lightly inside and out every few weeks in the close season, and thoroughly cleaned and oiled after each time it is used.

Water can be used instead of the soda solution, but it is not nearly so good. If water is used in a gun barrel, the barrel must be dried immediately and completely or it will rust badly. More than this, water will not soften the residue so quickly as the soda solution will. If the soda solution is used, little rusting would take place even if the barrel were permitted to dry without wiping. The soda solution neutralizes the acid in the residue left by smokeless powders, and thus immediately destroys the rusting and pitting action of that acid.

Take time to carry out each part of the work thoroughly, and the pleasure and satisfaction of using a perfect weapon will be your reward. H. S. Jewett, M. D.

IT IS UP TO PAGE.

Here is a letter from I. H. Page, President of the Stevens Arms & Tool Co., which will interest all readers of Recreation. Thousands of my readers have written just as strong letters in expressing their opinions of Recreation as the one which Mr. Page refers to.

It will interest my readers, therefore, to note that Mr. Page considers all such letters the result of bribery.

Chicopee Falls, Mass., May 20, 1901.
Mr. Chas. O'Byrne, Binghamton, N. Y.

Dear Sir—We have just received copy of a letter which you sent to J. H. McKibben, Secretary of the Peters Cartridge Co., in regard to advertising in Recreation.

The tone of this letter seems familiar to us and, after reading what you had to say in regard to Stevens rifles, it leads us to suppose that Mr. Shields is paying you to write such articles. If such is the case, we must assure you that it is a poor business to be in. Unless we hear from you to the contrary we shall always believe you did not write that letter without being paid for it.

We enclose you herewith stamped envelope, and would like to have you advise us if this is not the case.

Very truly yours,
J. Stevens Arms & Tool Co.,
I. H. Page, Prest. & Treas.

To which Mr. O'Byrne replies thus:

Binghamton, N. Y., May 22, 1901.
J. Stevens Arms & Tool Co.,
Chicopee Falls, Mass.

Dear Sirs—Your favor of 20th received. You certainly do me an injustice when you assume I received a consideration for writing the letter to Mr. J. H. McKibben, as the only solicitation for same is contained in the Editor's note on page 379 of May Recreation.

I also think you wrong Mr. Shields, for while I think he would value honest expressions of opinion, my estimate of his character leads me to believe that he would not adopt the methods you suggest. I am not acquainted with him, he has never given or offered me anything, and let me assure you that such an offer would materially change my opinion of him. The letter was written in a spirit of justice, with the hope that Mr. McKibben would reconsider the matter, as I think he gave it very little previous thought.

I did not approve of the editor's caption of the troublesome article, nor did I intend to criticise the withdrawal of your ad., as at the present time I know nothing of your reasons for so doing. I merely cited the case to show the value of Recreation as an advertising medium, and think it should receive the support of manufacturers of and dealers in sporting goods if the returns justify the outlay, which I presume they do; otherwise it would not exist.

Recreation has made me a member of the L. A. S., as it has brought more forcibly to my mind the need of game protection. At the same time it has taught me to enjoy the use of a rifle more, and a week seldom passes that I do not use 25 to 100 cartridges on target practice, and would use many more did not my duties as engineer prevent it. I have never spoken except favorably in regard to your goods, and never shall without reason.

While I may not agree with all Mr. Shields' ideas, his earnestness commends him to my support, which he will always have as long as he continues his present course. Never before have I criticised the action of any person which did not directly concern me, but there have been times when a word might have done good. Hoping the difference between you and Recreation is not so serious that it can not be satisfactorily adjusted, and with best wishes for the success of both, I remain,

Yours respectfully,
Chas. O'Byrne.

Mr. O'Byrne's letter to the Peters Cartridge Co., which Mr. Page claims was paid for, was published on page 214 of September Recreation.

I printed on page 70 of July Recreation an offer of $100 to any man who would prove that I had ever paid or offered to pay any man a penny for writing a letter commending Recreation to any advertiser. As soon as that article was put in type I sent a copy of it to Mr. Page, and wrote that it was up to him to either earn this $100 or to apologize to Mr. O'Byrne and me. Up to this writing he has not answered that letter. It would seem that the Stevens Arms Co. could scarcely afford to have a man at its head who would deliberately insult thousands of readers of RECREATION who have had occasion to speak well of it. I should not be surprised to hear of a change in the management of that company at an early date.—EDITOR.

HINTS TO PETERS.

Massillon, Ohio.
The Peters Cartridge Co., Cincinnati, O.:

Dear Sirs—It would seem to me, from what I have read of the difficulty between your concern and Mr. Shields, the editor of RECREATION, that there must be something behind your prompt withdrawal of your patronage from a journal that simply printed an honest criticism by a sportsman who wished others to have the benefit of his experience. If what that correspondent said in his note about your shells having too little rim for certain purposes is not true, why did you not simply write a note calling the editor's and the sportsmen's attention to the fact? If, on the other hand, it was true, would it not have been better for you to have said nothing? Of course it is no affair of mine, but I can't help feeling that your action was small. I have used many of your shells, and I don't say I shall discontinue using them; but I should certainly like you better if you would indulge in no more such unjust business.

Very truly yours, A. Demgeleisen.
Deputy Game Warden.

Woodstock, Ulster Co., N. Y.
Messrs. Peters Cartridge Co.,
Cincinnati, Ohio.

Dear Sirs—I can not help commenting on the attitude you are assuming against Mr. G. O. Shields and RECREATION. To say your action is childish is putting it mildly. I read the article you are crying over, but did not give it a passing thought, even though I have used a great many of your shells, until I received the May number of RECREATION, when my surprise was almost equal to my disgust at your action. Fortunately you are not the only shirt on the line, and I am inclined to think your competitors will get the benefit of your blunder. RECREATION will get the support of all true sportsmen, and that will shake all the plums off your best tree.

Yours truly, W. S. Mead.

Auburn, N. Y.
Messrs. Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs—I am surprised to read in RECREATION that you have withdrawn your ad from that valuable magazine. I am also sorry, as I used many of your goods during the year, and have always found them satisfactory; but I have my opinion of a company which will stop advertising in a paper because that paper prints a letter which is slightly unfavorable to them. In the first place, RECREATION'S great success lies chiefly in the letters which go to make up the gun and ammunition department; so I think it unjust to withdraw for the simple reason of one letter being printed unfavorable to your goods. Hereafter Winchester and Union Metallic goods will fill my bill.

Yours, D. S. Titus, Jr.

TELESCOPE SIGHTS.

In March RECREATION I read with interest the article entitled "The Mogg Telescope Sight," by W. D. Gruet, Hartford, Conn. Being one of those who find pleasure in the use of telescope sights, I venture a few comments.

I wish to compliment Mr. Gruet on his skill as a rifle shot, and to congratulate him on the possession of such a marvelous glass. I sincerely hope nothing may injure it, for where will he find its equal?

He says: "Hiding in a bit of timber an hour before daybreak I watched for squirrels. I thought I detected the motion of a squirrel's tail in a leaf nest in the top of a tall tree, about 85 yards distant. . . . I could see him plainly through the 'scope, and placing the cross-hairs on the middle of his neck, I pulled the trigger and down he came. I found I had hit just where I had held."

A truly marvelous shot!

He continues: "A few moments later I saw an object on a limb about 40 yards distant, which, in the darkness, I took to be a small owl. But, looking through the 'scope, I saw it was a large, fat squirrel."

That one, also, falls, shot through the head.

Two other squirrels fall at 75 yards, making 4 shot through head or neck in the gray, uncertain light of early morning and under conditions most trying to the best rifle 'scope on earth.

Though not so stated, I assume this was offhand work. If so, compare with Mr. Britt's score on preceding page of same number.

Mr. G. makes invidious comparison between the Malcolm and Mogg glasses. This is uncalled for. Both makers have been long before the shooting fraternity as manufacturers of fine telescopes, and hundreds of their glasses in the hands of shooters tell what a hunting or target scope can do.

Wm. H. May, M.D., Syracuse, N. Y.

CLOSE SHOOTERS.

I notice G. A. Mero, Becker, Minn., wants information about shot guns, so I submit my personal experience. I have owned for 5 years a Baker hammerless gun, 10 gauge, 32 inch barrels, weight 10 pounds, and find it all right in every way. I shoot 5 drams DuPont powder and 1 1-3 ounces shot, usually No. 8, as I find it certain death under 50 yards. I never shoot anything larger than 6's except for extremely long range, say 100 yards and upwards, when I use No. 1's. I think most people shoot too big shot, for I can kill ducks at 50 to 60 yards with No. 8's. I have also used Ithaca guns many years and can recommend them as fine weapons and good shooters. I should like to see more about duck hunting and something from this part of the country.

T. A. Morgan, Morgantown, W. Va.

G. A. Mero, Becker, Minn., says his Remington does not shoot close enough to suit him. He must have a cylinder bore or his gun is too closely choked, or he has not used the right load. I have a Remington ejector 12 gauge, 7¼ pound, full choke, that at 45 yards with 3½ drams smokeless powder and 1⅛ ounces No. 5 shot, placed 9 pellets in a space 3x5 inches. I thought at first that my gun did not shoot coarse shot well, but found it depended on the loading.

L. Shannon, Chipley, Fla.

If G. E. Mero wants a close, hard shooting gun I advise him to try a Syracuse. I have owned one 3 years. For close, hard shooting it beats any other gun I ever shot, and I have used many that cost several times as much as my Syracuse. I can not speak too highly of it or of its manufacturers. D. J. Kelly, Baldwinsville, N. Y.

ANOTHER MARLIN CLOG,

In the December number of Recreation I find on page 459 a statement about the Marlin rifle. Will you kindly allow me to say that Mr. Burk and others speak my sentiments regarding the Marlin? Two years ago I was up at Enchanted pond, in Somerset county, near the Kennebec Forks. I had only a Winchester shot gun with me, and, wishing to get some large game I hired a Marlin rifle. It was a 40-60 model. I bought shells and started with a guide to have a good 2 weeks' hunt. We went 22 miles from Mr. Murphy's hotel, and on the third day out we got sight of a fine buck. My guide was on a hill about ¾ of a mile from me when I fired the first shot. I hit the deer in the shoulder and he came right toward me. I tried to get another shell in the gun, and could not do it. The carrier threw a cartridge up in the carrier spring and there I was. The buck went by within 75 feet of me, but I was helpless, 20 odd miles from any house or place where I could get a gun. Of course, my guide loaned me his Winchester, which I used with good results.

When we came out of the woods and got to Mr. Murphy's hotel I saw 4 other Marlins, all hung up. I told of my trouble with the Marlin, and the owners of those rifles said that all those guns needed repairing. They more than condemned the Marlin rifles, and asked me to send them some Winchesters.

I have used a Winchester, 38-50, with good results. I think of trying the Savage another season if they are all right, but I would not carry a Marlin 5 rods. I have hunted and trapped more than 27 years, and the Marlin repeaters are the poorest I ever used.

I am glad to see Recreation come out so strong against fish and game hogs. Keep right after them.

Geo. H. Rock, New Auburn, Me.

THE 22 AND THE 22 SPECIAL.

Reading a recent number of Recreation, I noticed that F. S. Rose desires to know how the 22-7-45 cartridge compares with the 22 long rifle. Being somewhat familiar with both cartridges I venture a reply.

I am now using a 22-7-45 Winchester repeater, which I have had nearly 2 years. Before buying it I had never used anything except the regular 22's. It is difficult to draw a comparison between those 2 most excellent cartridges. In the 3 essential features—accuracy, penetration, and trajectory—they are much alike. All shooters know, however, that the 22 long rifle can not be beaten at ranges from 100 feet up to 100 yards; but the 22-7-45 can be depended on to go where it is held every time. The flat point of the 22 special gives it less penetration than it otherwise would have, and makes it almost identical with the 22 long rifle. In my experience I have not found much difference in trajectory, the advantage, if any, being with the 22-7-45.

The one great point in which the 22-7-45 excels the 22 long rifle is its superiority as a hunting cartridge. Its extra weight and flat point give a much greater smashing effect, while there is nothing lost in the other essentials that combine to make a perfect cartridge. If I wanted a rifle for target use only, I should prefer the 22 long rifle; if I wanted it for hunting, the 22 special would suit me best.

Edw. McGaffick, Winona, O.

THE PROOF OF THE PUDDING.

Although "Ivory Bead" forgot to sign his little proposition in January Recreation, I am willing to take him up. I will cover all the money he cares to wager that I can make as good a target with my

25-35 as he can with either a 45-70 or a 45-90. Moreover, I will bet 2 to one that I can shoot deeper into any substance with a 25-35, 25-36, 30-30 or 30-40 than he can with any 45. It is strange how much trouble the black powder fossils take to convince themselves that their old cannon will outshoot the smokeless powder rifles. All hunters know that when using soft lead the swifter the bullet travels after passing the 1,200 feet a second mark the less its penetration in wood. They also know that the gun that lets the bullet stop in the animal gives a greater shock than the one that drives the ball clear through. "Ivory Bead" is wrong in saying that no smokeless bullet will mushroom at 1,000 yards. A 25-35 soft point, fired into wood at that distance, will expand to 3 or 4 times its original size. Money talks, and we will finish this little argument at our shooting match.

M. P. Dunham, Ovando, Mont.

WINCHESTER NEVER BALKS.

Having used rifles continually for the past 12 years I venture to give my experience. I have used the Winchester 32-20, 38-55, 40-82, 44-40, 45-60, 45-70, 45-75 and 45-90; Colts 40-82 and 22 long; Marlin 38-55, 40-82 and 45-70; Remington, 45-70; Sharps 45-70, 40-90 and 45-110; Springfield 45-70; Stevens 22 long rifle. I have never owned a Marlin that worked perfectly. With Colt's Lightning my experience has been the same. I have yet to see the first balk in a Winchester. I have used them from Maine to California and Florida, and my choice for large game is the 38-55 mushroom ball, smokeless Winchester. I like the 22 caliber Stevens Expert No. 1 for small game, such as rabbits, grouse, ducks, etc., much better than any other small bore, on account of the weight and hard shooting. I do not like the 30-30, .303 or 30-40. They are more powerful than necessary, for with the soft nose 38-55 I can stop any animal the others will, as the majority of kills are made on the short side of 200 yards.

W. H. Long, Walden, Colo.

SOME MAUSERS SATISFACTORY.

I should like to hear from someone who knows about the shooting qualities, accuracy, balance and general fitness of Lee straight pull rifle, 6 m-m., as a game gun.

Will say to Harry D. Frogg that a Mauser in good condition is as good shooting a gun as any man could ask for. A second-hand Mauser, such as are sold in this country, may be an uncertain quantity as to accuracy.

Lou McFarland, of Coalingo, has a gun that pleases him greatly, but he must not think because he once dynamited a deer with it that he can do so always. The next time his friend's Savoy may prove the better gun.

Three seasons ago, while hunting on the divide West of Joaquin Rocks, I shot a buck with a Winchester single shot 32-40 not less than 200 yards distant. The shot broke a hind leg below the knee, entered the center of belly, passed through heart, and lodged in bone of neck, but I am never going to do the same thing again.

Dave O'Daugherty, Huron, Cal.

SMALL SHOT.

K. C. G., in January RECREATION says he is about to buy a belt revolver, but is unable to decide on the caliber, and thinks a 45 too smashing for grouse and the like. I think so, too. I advise him to get a 6 shooter, chambered for 10 gauge shells. Then he could use shot for birds; they think it more sportsmanlike. For moose or Indians he could use armor-piercing projectiles or lyddite shells. He asks about using balls in a shot gun, and about increasing the shooting power of the 45-70. Yes, K. C. G., you can use balls in a shot gun; in fact, that is what a shot gun is built for. Always use bullets in a shot gun and shot in a rifle. Grease the bullets and wrap them in a gunny sack or an old flannel shirt. With 5 to 10 drams of good powder they will kill any grizzly that will let you put the gun in his ear. Load your 45-70 shells with about 4 fingers of nitro-glycerine and ram hard. The result will surprise you.

W. K. Boyd, La Junta, Cal.

I have been using a 16 gauge hammerless Syracuse gun, cheapest grade, for 2 years, and it has been a source of great pleasure to me. It has never failed to score when held right. I am not even an average trap shooter, but have taken 20 out of 25 Blue Rocks at the same distance as 12 gauge. At the trap I use 2¾ nitro and 1 ounce 7½. This is a special load. In the field at all kinds of game I use 3 drams black powder and ⅞ ounce of No. 1 shot. Have dropped a good many grouse, woodcock, chickens, rabbits, etc., at 40 to 55 yards. The ordinary factory loaded shells do not shoot well in the Syracuse 16. There is too much recoil and too little penetration. I can not recommend my field load to the pot hunter, but it anyone wants good, clean sport and the satisfaction that comes from skillfully handling a good reliable gun, let him use a Syracuse 16 with my load.

F. C. King, Marshall, Wis.

A correspondent in March RECREATION asks how it is that .303 British cartridges are sold in Canada at $1.50 per 100, when they cost so much more in the States.

The answer is this: The government issues them to the rifle associations at a low rate. One must belong to these organizations to get them, and they are supposed to be used only at the range. Moreover, we are able to get only full mantled bullets, which, even when notched with a file, are almost useless for sporting purposes. It is said to be against the law to use them off the range in time of peace. Soft-nosed cartridges must be bought at the stores, and cost even more than in the United States. Those of Canadian and English make are loaded with cordite; the half mantled are of American manufacture, and are, I believe, loaded with high grade smokeless. Cordite is, of course, a smokeless powder.

F. A. Good, Woodstock, N. B.

Would cutting 4 inches off the muzzle of a double barrel, 10 gauge, modified choke bore shot gun cause it to spread too much? It is chiefly used in brush with No. 6 shot, and occasionally No. 4 for ducks. It has 32-inch barrels.

P. H. McKay,
Spafford, N. Y.

ANSWER.

It is never safe to change a gun or rifle from the model adopted by the maker. He adapts the choke to the length of barrels, gauge, etc., and chambers the gun for certain kinds of work. If you should cut off the muzzle of your gun it would not only cause the shot to spread much more than you would wish, but it would disturb the plan as to the burning of the charge of powder, range, penetration, etc. If the gun is not satisfactory in its present shape you would better sell it and buy a new one of the proper length.—EDITOR.

Before you choose a new gun examine one of the higher grade, recently improved Ithacas. With the new reinforced frame, the new double-thick breech, the new stock fastening and the improved skeleton rib the Ithaca people have an arm not only beautiful but with shooting and wearing qualities beyond dispute. I have had experience with guns of high and low degree, have fired many thousand shots, and I honestly believe no other sporting arm, English or American, can surpass the highest grade Ithaca. If you want a cheap arm that is a perfect shooter, and desire it for rough and tumble service only, get a low grade Ithaca. If you want a perfect poem in steel and wood, and one that can stand the rough and tumble part, too, get a high grade Ithaca.

Wm. M. Byram, M.D., Richmond, Mo.

I know of no shot gun that will outshoot or outwear a Remington. There are other good guns, but none I would rather have at anything like the price. I have owned 2 Remingtons of different styles, have known many others, and can testify to their merits. Their joints are perfect and they stay that way. Just now I have a small 16-gauge, semi-hammerless Remington, which answers my every purpose. It is a shooter of the first order, and exceedingly handy when the hunter is in a hurry to shoot. I use with it a Barger sight, which has much improved my skill in shooting. I love to hunt game and shoot it in moderate quantities; when I feel like burning more powder, I find some kind of inanimate target. That affords practice and keeps my conscience easy.

C. A. Ross, Rock Falls, Ill.

In July RECREATION I noticed a letter by James Colton, Normal, Ill., in which he condemns Peters 22 cartridges. He says they will not shoot far, and that they miss fire once in 5 shots.

I have a Stevens Favorite, with Lyman front and rear sights, and shoot Peters semi-smokeless cartridges altogether. Recently I got a box of Peters shells and killed 29 sparrows out of 43 shots. I never knew a cartridge of that make to miss fire.

I like them because they do not dirty my gun so much as black powder shells, and because they shoot harder.

I have owned a rifle 5 years, and think the Stevens Favorite as fine a little gun for the money as any made.

Wilfred Eakin, New Castle, Pa.

We notice an inquiry in August RECREATION, from W. A. B., asking whether a 26 inch 12 bore gun will shoot as far and as close as a 28 inch of same bore. Our long experience in building guns has taught us that 26 inch guns, as a rule, will not make so close a pattern as a longer gun. With black powder the penetration is not so good with a short gun, but with any of the popular brands of nitro powder a 26 inch gun will have as much penetration as a 28 inch, and the difference in pattern will not be more than 10 per cent. We have noticed a great demand this season and last for 26 inch barrels, especially among the quail shooters of the South and the grouse hunters of New England.

Ithaca Gun Co.,
Ithaca, N. Y.

Please tell me where I can obtain extra parts for the semi-hammerless, single barrel shot gun made by the American Arms Co., of Boston, Mass.

Vern Smith, Grayville, Ill.

William Read & Sons, 107 Washington Street, Boston, are agents for the gun you name. Write and tell them what you want, and they will quote you prices.—EDITOR.

I have been experimenting with low pressure loads in a 30-30 rifle, and have obtained good results. For medium loads I like DuPont No. 1 smokeless rifle powder. It is cheap, clean and does not injure the gun barrel. Can as much be said of Du Pont 30 caliber powder? Do copper cased bullets wear a barrel rapidly? Please answer through RECREATION.

J. N. Nichols, Bass River, Mich.

I see Jay Bee says the 45-90 shoots like a bell muzzled gun. I have one, and certainly can not agree with him. It will outshoot the 45 Martini at 300 yards, and considering the much lighter bullet this is a most creditable performance.

W. T. Adams,
Howick Station, Natal, Africa.

I advise J. F. Wilburn to buy a 22 caliber rifle, chambered for the long rifle shell. While it has not so long a range as the 25-25, it is more accurate and is plenty large enough for game up to raccoons. It is also much cheaper, which is a point worth considering if one does much target shooting.

L. Arthur, Point Pleasant, W. Va.

I would say to J. D. Soulsbery that I have used the 25-20 Winchester and found it a good gun for game up to antelope. Am now using a 32-40. It does good work on deer, elk and antelope. I should like to hear from someone using the 32-20 single action revolver, with 7½ inch barrel.

H. L. Andrews, Jackson, Wyo.

I have a 30-30. It is a good gun; but a 30-40 is the gun for me. The Savage Arms Co. claims its gun will penetrate 50 inches of pine. That would be equal to about 58 ⅞ inch boards. In the Winchester table the penetration is given as 33 ⅞ inch boards. Which is right?

R. M. C., Red Lodge, Mont.

I, also, can assure Wm. Blake that the Remington hammerless gun will not shoot loose. I have used a 12 gauge, 28 inch barrel Remington hammerless 7 years. It has seen much service, yet is as tight as when I bought it.

W. W. Wilson,
Washington Depot, Conn.

If C. I. O. C., St. Joseph, Mo., will give me a little time I shall be able to tell him something about the 22-15-60 S. S. Herrick rifle, 26 inch barrel. When I have given it a fair trial I will report, stating straight facts as I find them.

Capt. Geo. Scott, Oak, Cal.

Will some sportsman please tell me how to load, to secure best results, an old-fashioned army revolver, using percussion caps? Is it necessary to use wads between the powder and bullet and over the bullet? The caliber is 44.

Repeater, Jamestown, N. Y.

I should like to hear from someone who has used the Stevens Ideal No. 44 rifle. Is it a good gun and what is its range with the 32 rim fire cartridge? Will it do good work with the 32 long R. F. at 300 yards?

W. S. Mead, Woodstock, N. Y.

I should like to know whether there is a difference in velocity, penetration, and trajectory between the 38-55 black powder cartridge and the smokeless of the same caliber? Are they equal in accuracy?

F. S. Onderdonk, Mexico City, Mex.

The U. M. C. Challenge shell seems to be made of harder paper than any shell I have ever used, and works one quarter faster in a repeater, which counts considerably at certain periods of a duck hunt.

C. A. R., Bloomfield, Ont.

Should like to hear through RECREATION from sportsmen using 20 and 28 gauge guns. Please state kind of game hunted, make of gun and load used.

E. C. Statler, Grand Island, Neb.

Tell L. A. S. 2239, that soft point bullets for the Lee rifle are made by the U. M. C. Co. Tell Mr. Thompson the H. H. Kiffe Co. makes shot spreaders.

38-72, Batavia, N. Y.

I find the Gun Department of RECREATION interesting and profitable. I have learned several valuable facts from it.

S. A. Nash, Brookline, Mass.

Please tell me whether any of the makers who advertise in RECREATION make a 28 gauge shot gun?

T. L. N., Emporia, Kan.

Will some reader who has used a 20 bore gun at the traps tell me what load he found most satisfactory?

G. C. G., Indian Head, N. W. T.

I should like you or some subscriber to tell me of the shooting qualities of the Remington hammerless shot gun.

C. A. M., Newark, N. J.

I should like to hear from users of the 25-20 what they think of it as a target and hunting rifle.

A. J. Lang, Rondout, N. Y.

NATURAL HISTORY.

When a bird or a wild animal is killed, that is the end of it. If photographed, it may still live and its educational and scientific value is multiplied indefinitely.

DO GROUSE DRINK?

Mr. Rice's interesting article in RECREATION calls to my mind many pleasant hours I have spent in the woods of New York and Pennsylvania trying to discover how grouse drink.

One warm August afternoon in 1875 I was sitting beside a little spring run in a piece of second growth timber. Presently 2 cocks and a hen grouse with her brood of 7 chicks stole out from cover. They wandered along the little stream, frequently crossing and recrossing it in plain view. I have always been interested in noting the habits of these birds, and the fact of their being so near the cool water caused me to watch them. They remained within sight more than an hour, and not one of them drank during that time. Since then I have had many chances to observe grouse closely, and have yet to see one drink from a brook or pool. I have, however, seen them pick at dew and rain drops on small twigs, ferns and leaves.

I fear I was something of a pot hunter in my youth, but have outgrown that, and have shot only one grouse in the last 25 years. Most of my leisure for 20 years has been spent in the woods and fields, studying nature to the best of my ability. I could give many facts that would, I think, be of interest to the lover of birds at least.

W. J. W., Wellsville, N. Y.

I notice in the October number of RECREATION an article headed, "Do Grouse Drink?" by A. F. Rice. Many old sportsmen will say, "Of course they do; because don't they always follow streams in dry weather?" But how few, if any, can say they have ever seen a grouse drink? I have never but once seen any of the grouse family in captivity. That was a young prairie chicken, or pinnated grouse, caught when only about a week old. For a few days it looked as if it would die. It would not drink. Finally one day during a rain storm the grouse was noticed catching drops of water that were dripping in its cage. Acting on that theory, a small bunch of green grass was tied in one corner of the cage, a little water poured into it and allowed to follow down through and drip from the ends of the grass, when presto! the grouse had a drink. After that, as long as he lived, he drank in no other way. This may not be the only way a grouse will take water, but I am inclined to think it the natural way, and only in dry weather or when lacking dew would they drink any other way.

M. H. Douglas, Abbotsford, Wis.

In November RECREATION Mr. Rice asks whether grouse drink in the manner of other fowls, giving his reasons for thinking they do not; but in the case he mentions he does not name the species of grouse referred to, on which, in my opinion, the whole case turns. Possibly the following from "Wilson's American Ornithology," Vol. I., pages 402-3, may be of interest to him: "A person living near Nashville caught an old hen pinnated grouse and kept her in a large cage. He remarked that she never drank, and even avoided the part of the cage where the water pan stood. Happening one day to let some water fall on the cage, it trickled down the bars in drops, which the bird no sooner observed than she eagerly picked them off drop by drop with a dexterity that showed she had been habituated to this mode of quenching her thirst." In the case of pinnated grouse this peculiar way of drinking is not so remarkable as it appears at first sight, since on the natural range of the species there is little water to be found except raindrops and dew.

E. P. Venable, Vernon, B. C.

Mr. Rice asks whether grouse drink like domestic fowls. They do; in some instances, at least. Last fall my brother caught a pinnated grouse. During the 3 weeks it lived in captivity we had every opportunity for observing its habits. We clipped one wing and let the bird have the range of the house. It never seemed in the least afraid, and if disturbed would scold and fly at the offender. When interested or startled it would cackle much as hens do, though not so loudly. It ate wheat and bread crumbs and drank water exactly as a hen would. It was finally given the liberty of the yard, where its first act was to drink from a puddle. While on parole, as it were, the poor bird was killed by a cat.

L. A. R., Hawley, Minn.

Some years ago our dog killed a grouse on her nest. My father took the 11 eggs which the nest contained and put them under a bantam hen. All hatched on the 23d day, and the chicks were running about within an hour after leaving the shell. They would pick food from a dish or from the ground, but would not drink water from a pan. They were noticed picking drops of water off the grass where it had splashed when the pan was filled. As long as they were kept they were not seen to drink in any other way.

E. H. Cahoon, Akron, O.

Of course the grouse drinks water; otherwise it would be an exception to all physiological law. Just how it does so is another question. I am inclined to think it drinks like the domestic hen; though doubtless in seasons of drouth, or when far from any other source of supply, it can obtain sufficient water by picking dewdrops from leaves and grass. Mr. Rice's letter is exceedingly interesting and should incite every true sportsman to a closer study of bird and animal life.

Dr. W. D. Sigler, E. Palestine, O.

FACTS ABOUT THE EEL.

The method of reproduction of the eel has long been a mystery to the popular mind, and all sorts of absurd views have been held by the unscientific. It has been claimed that eels are generated from the mud or slime in the bottom of streams or bays. Even as late as last year a well known paper published with apparent approval a stupid article by a writer who claimed to have demonstrated beyond the possibility of a doubt that all so-called "common eels" are males, and that the lamprey eel is the female.

The article by Mr. Haskins in June, 1901, Recreation stated clearly a number of important facts in the life history of the eel. On the other hand, the article by Mr. Wixson in November Recreation, and the letter of a more recent correspondent, would indicate that the respective writers are not familiar with what is really known regarding the eel.

The spawning habits of the eel have been well understood by naturalists for many years. The essential facts were demonstrated by Sancassini as early as the 18th century. Since then various investigators, including Mordini, Syrnski, Jacoby, Grassi, Calandruc, and others have verified or added to those experiments, until we now know as much about the method of reproduction of the eel as we do regarding that of the majority of our fishes. There is a vast amount of literature on the subject, readily available for anyone who cares to go into the matter. The essential facts can be stated briefly.

Eels, like all other fishes, are of 2 sexes. The females are usually larger than the males, paler in color, with smaller eyes and higher fins. Both are found in fresh-water streams, and both run down stream to salt water when the spawning season approaches, which is in the fall. The eggs of the female eel are almost microscopically small and exceedingly numerous. They are usually deposited in salt-water bays and inlets, though they may, under unusual circumstances, be laid in fresh water. After extrusion from the body of the female the eggs are fertilized by the male.

After the eggs hatch, the young eels remain some time in salt water, and then ascend fresh-water streams, in many cases for long distances, where they remain until mature and ready to spawn. It is believed that both sexes, like the West coast salmon, die after once spawning, but this has not been proved.

The mystery regarding the spawning habits of the eel was due chiefly to the difficulty of distinguishing the eggs, owing to their extreme smallness and to a failure to find young eels in fresh waters, where adults could be found at all times. Eels often move considerable distances on land in wet weeds or grass, often passing around waterfalls, dams and other obstructions in this way.

They are among the most voracious of fishes. "On their hunting excursions they overturn alike huge and small stones, beneath which they find shrimps and crawfish, of which they are fond. Their noses are poked into every imaginable hole in their search for food, to the terror of innumerable small fishes."

B. W. Evermann.

In November Recreation Mr. Wixson denies that eels migrate. I think they go to salt water if they can get there. That they go to breed, I am not so sure, for young eels can be found here at any time. The machinery of a factory in which I am interested is driven by a turbine wheel of 18 horse power. The fall is 18 feet from top of dam to wheel. Between the first and the middle of November eels begin to run down the pipe that feeds the wheel. If there comes a cold rain they run in such numbers, as to stop the wheel, and we have to go into the wheel pit and pull them out 2 or 3 times a day. The run continues 2 or 3 days, and then is over for the season.

Our dam is 125 feet wide; the wall is 10 feet high and perpendicular. In the spring I have seen the entire face of the dam fairly alive with eels trying to get back to the pond. I have watched them struggling to get up when there was barely enough water running over to keep the face of the dam wet, and have seen them succeed in reaching the top.

Eels will go in the night from one pond to another, crawling in damp grass. If Mr. Wixson doubts this let him some night put some living eels in the grass 20 rods or so from the pond where they were caught. He will be surprised to see how quickly they will reach the water, and how direct a course they will take. When eels are observed gathering in bunches they are, I think, getting ready to go down stream, I have heard that no one ever saw the spawn of an eel. A fisherman whom I have known for years has promised to obtain some eel spawn, and I will send it to you in alcohol. My friend says that with a microscope the eggs can be plainly seen. I hope you will find someone to examine what I shall send you, and so settle the question.

S. W. Shailer, Ivoryton, Ct.

"WHAT WAS IT?"

Beaver Falls, Pa.

Editor RECREATION:

A year ago last fall, while fishing for bass in Little Beaver creek, a small stream near the Ohio State line, and therefore keeping as quiet as is possible under the annoyance of swarms of zealous mosquitos, my attention was drawn to a peculiar sound, which at first seemed to be the tapping or pecking of some small bird of the woodpecker species on a tree a short distance away. Listening intently, I decided that the sound was too dead, or muffled, and was neither frequent nor regular enough to be made by such a bird. From where I was sitting, on the bank, it was difficult to determine the location of the peculiar noise, and it was some time before I partially satisfied myself that it was caused either by a movement of entangled branches in the dense clump of woods to the left a short distance, or by the swinging of some of the thick undergrowth against a barbed wire fence that cut through the woods. There was not the slightest breeze stirring the leaves on the trees, which was puzzling. Then I noticed more particularly a small tree a short distance down the creek whose roots had been gradually undermined by the current, until it had slipped over, leaving its full leaved top lying in the stream, but nearly all out of water by reason of the shallowness of the creek at that point. This tree had fallen in such a way as to leave its roots intact, for it was not only growing but apparently thriving in that position. Against the branches where they touched the water was drifted a small quantity of old bark, short sticks, roots, rotten wood, etc., held together by a mass of dirty foam from a ripple just above. I finally concluded that the questionable tapping came from the dense foliage of this fallen tree where it lay against the water. I cast a stone therein and several small birds flew out. Then silence came. I thought those birds had something to do with the noise; but I went home still puzzled.

Last September, in company with my brother, who claims to know something of animals and birds and their habits, I again went after bass in the same place, on the same kind of a good hot day. We had scarcely cast our lines when we heard the same tapping noise that had mystified me a year before. Believing it came from the same recumbent tree, which the past year's freshets had left undisturbed, I set my rod and moved up by the tangled roots, determined, if possible, to discover its cause. I sat a long time. A few of the same small birds darted in and out of the branches, and a poor little field mouse, with a mouthful of something, poked its head out from a clump of matted leaves on the water to see if the coast was clear and then ran rapidly up the trunk over the roots and disappeared in a hole in the bank. I thought perhaps that was a solution, but the noise soon continued. Shortly afterward, by the interruption of the glancing rays of the sun where they fell on a small patch of the above mentioned drift in an opening among the leaves and were reflected to my face, I noticed that the *debris* had been slightly disturbed. That was a clue, and on further careful observation I saw that the tapping always accompanied a slight disturbance of some part of the drift. I do not know any clearer way to explain the nature of the sound and the quality of disturbance than to say it seemed as if some strong billed bird was underneath in the water and pecking upward at the various small pieces of driftwood, or bark. I called my brother's attention to it and asked him what was causing it, but he gave it up, after suggesting it might be muskrats, for it happened sometimes simultaneously, at several different places in the *debris*, but always accompanied by the inevitable tapping and the slight lifting of the small piece of wood disturbed a little upward in the water. I will be grateful if you can inform me what animal was causing the disturbance and sound described, if it was feeding, etc.

T. F. Covert.

Can any reader of RECREATION explain? —EDITOR.

COON CHATTER.

I notice an article written by F. W. Allard, Atlanta, Ga., who claims that coons make no noise. He is entirely mistaken. A coon makes a great deal of noise and can be heard on a still night in the fall almost a mile. Their call is hard to describe, but it is shrill and quivering, and in timber or a cornfield is hard to locate. I remember at one time, when a boy, having a pet coon, caught when quite young, the mother having been killed a few days before. In a few weeks after being captured cooney had the run of the farm, and during the time she remained with us never took an egg or killed a chicken, although for mischief I never saw anything equal her. Several times in the fall I took her miles in the woods. She would follow me anywhere like a dog. I would try to leave her and get back home; but every time she would come humping along a little later. In November she hibernated under a beam in a hay mow, and would only show herself a little on mild days, eat a little and go back. In March we had a warm rain, and she left never to come back, although she came back in August with a family, which she raised close to the farm. She was so tame that she would bring them almost to the house at night, and could often be seen. Talk about calls or noises! You could hear all you wanted without having any owls mixed in. Later in the fall the family fell the victim of coon dogs.

I consider RECREATION the best magazine in the States, and will guarantee it will cure any game hog if he will read it one year. When I first took the office here there was not a copy coming here. Now there are several, and thanks to Dr. G. B. Johnston, they are still increasing. Doc. is a hustler for new subscribers, and can dissect a game hog so he would never root any more. They would better keep away from him.

M. H. Douglas, Abbotsford, Wis.

I have had several coons as pets. One, a youngster, became friendly with a neighbor's pup. The coon was kept chained to an iron pin, and the dog came to play with him several times a day. When the pup wandered away the coon made a noise as if to call him back.

Last spring I caught 3 chipmunks and put them in a cage. I had heard that these animals do not take kindly to captivity, but 2 of mine became exceedingly tame. While they were busy putting away their winter's supply of food, one killed the other 2. Now he is alone, storing all the food he can get into a box.

George Ross, Carrollton, Ill.

I was much interested in F. W. Collard's article entitled "Do Coons Chatter?" Whatever they may do in Georgia, raccoons certainly chatter in Ohio, both at large and in captivity. While uttering the cry they usually stand on their hind feet and rub their forepaws together. There is no question in this region of confounding the coon's call with that of the red screech owl. In 50 years spent here I have never seen one of those owls. We have the grey screech owl, but its cry is unmistakable.

S. W. Riggs, Sullivan, O.

In November RECREATION I read what was said about coons making a noise. They have a fuller, deeper note than a screech owl, and it can be heard farther. It does not seem loud when heard close by, but the sound carries a long distance. I was in the middle of a city one summer night and heard a coon's cry. I spoke of it, and a friend said, "There is a pet coon about 2 blocks from here."

M., Princeton, Ill.

SNAKE TALK.

I have read with much interest the discussion in RECREATION as to how rattlesnakes reproduce their young, and I should like to hear from someone who knows what he is talking about as to the height a full grown rattler can strike, and what thickness of clothing, boots or shoes would resist a strike of its fangs. A miner who had prospected in Arizona 7 years, and whose word I never had any occasion to doubt, told me that once while he was sitting beside a trail in that country he saw 2 roadrunners approaching. Suddenly they stopped, their attention seeming to be drawn by some object on the sand before them. After holding their heads together a few seconds, as if debating what to do, they separated and began to gather pieces of cactus, which they placed in a circle around the object of their attention, a sleeping rattlesnake. After completing the circle they ran a short distance away and began to chatter in a noisy manner, to awaken the reptile. Hearing the noise, the snake made a start to get out, to learn the cause. Finding his way barred by cactus he turned to go in another direction, only to find the same thing. After going from one side to another and finding no exit he became mad, and turning struck his fangs into his own body. The birds, which were watching with great interest, and which seemed not to notice the miner, waited until the snake had made his last struggle. Then they entered the circle, dragged out the body and inspected it, turning it over first one way and then another, all the time chattering at a great rate to each other. After satisfying themselves they proceeded on their way.

Geo. R. Dunahoo, Los Angeles, Cal.

ANSWER.

The height a rattler can strike depends altogether on the size of the snake. A reptile 4 feet long could, if he tried, strike a point 2 feet above the ground; but they do not usually try to strike very high. A boot or a legging that would come just above the knee would probably be safe in all cases. EDITOR.

I have taken much interest in the snake stories in RECREATION. Several years ago, while walking with friends along a country road in Franklin county, N. Y., a greenish snake 2 or 3 feet long was encountered. To our astonishment it opened its mouth wide, while into it rapidly disappeared 8 or 10 young snakes 3 to 4 inches long. The reptile was killed. When it was lifted by the tail, out of its mouth slid the young snakes, one by one. While not a snakeologist, I am sure the snake belonged to a species common in that region.

Chas. E. Hutchinson, Los Angeles, Cal.

YOUNG BIRDS AND MAMMALS AT THE NEW YORK ZOO.

Thus far for the present year the record of births in the Park is very gratifying. In the Bird Department, Mr. Beebe has been very successful in all his breeding operations, particularly with the pheasants in the Schieffelin collection, and his work will be reported on in detail in the next number of the Bulletin.

Notwithstanding that continual blasting and building disturbed the birds frequently, 20 species in the Park nested and laid eggs, and of these the 12 following have successfully hatched and reared their young:

Golden Pheasant, Silver Pheasant, Reeves' Pheasant, Lady Amherst Pheasant, East Indian Black Duck, Ring Dove, Canada Goose, Mallard Duck, Wild Turkey, European Herring Gull, Jungle Fowl, California Partridge.

Other species are incubating, and this list will be considerably extended.

In addition to the above, Mr. Beebe has collected, and is now rearing, an interesting collection of nestlings, representing the following species:

Kingfisher, Catbird, Screech Owl, Meadowlark, Baltimore Oriole, Cowbird, Flicker, Robin, American Magpie, Crow, Song Sparrow, Rose-breasted Grosbeak, Red-winged Blackbird, Black Crowned Night Heron, Yellow Crowned Night Heron, Green Heron.

Naturally these young birds attract much attention from visitors, to whom they are much more of a novelty than adult birds.

To meet their ever-growing demands they require to be fed every hour, save at night.

Amongst the mammals, the most important births up to date are the following:

1 Buffalo (female), 1 Fallow Deer, 3 Elk, 2 Axis Deer, 5 White-tailed Deer, 6 Coyotes.

Other Buffalo calves are expected, and in reality are now overdue. The Mule Deer, Black-tailed Deer and Prong-horned Antelope are yet too young to breed.—News Bulletin of the Zoo Society.

HOW TO KEEP BEAVERS.

Will you please tell me how I may keep beavers? I live near a small river. What do they eat and do they require deep water? C. F. Derly, Cranford, N. J.

ANSWER.

Beavers require an enclosure consisting of an iron fence standing on a stone wall, which goes into the ground about 2 feet. The fence may be made of wire netting, provided the wire is sufficiently heavy so the beavers can not break holes through it, as they can easily do through ordinary light netting. The wire should be about No. 12. The top of the fence must overhang on the inside in such a manner that the beavers can not climb out. In the Zoological Park the beaver fence is made of iron rods ⅜ of an inch in diameter and 2 inches apart, which curve over at the top 16 inches in a half circle. This fence is rather expensive, however, and a cheaper one can be made of wire.

Beavers require plenty of small trees and brush with which to build their dams and houses; also the bark for food. If there are any high banks in the enclosure the beavers will burrow in them and make comfortable homes. In case the banks are low the beavers must be provided with small houses of wood covered with earth, and having entrances of sewer pipe running down into the water. The beavers require at least 3 feet depth of water, but if the conditions are right they will obtain the proper depth by building a dam for themselves. They will bark or cut down all trees within their enclosure that are not protected by sheet metal or wire netting. The best method for protecting trees is to use strong wire netting at the base with sheet metal above, so they can not climb up to the unprotected bark.

The food of beavers in captivity consists of corn on the cob, or shelled corn that has been boiled; as many kinds of food wood acceptable to them as can be procured; also bread, carrots, turnips and other vegetables. If too many beavers are placed in one enclosure they will fight and some of them will be killed. W. T. H.

REGARDING DEER HORNS.

Please pardon me for troubling you with a few questions which I could probably find answered in books on natural history; but as they relate to game I prefer the authority of RECREATION.

Do buck deer shed their horns?

If so, how often?

Are the horns ever knocked off?

Do they contain a pith like the horns of cattle?

How long does it take a set of horns to grow?

Why is it we find so few horns in a deer country?

E. E. Munn, Bradford, Vt.

ANSWER.

All species of deer, elk, moose and caribou shed their horns every year in December, January or February. Occasionally an animal gets one broken off in a fight or in some other way at other times, though not often. Nearly all the horns shed by these animals could be found in the countries where the animals live if a man should hunt over the ground thoroughly.

I have a photograph in my office of a stack of elk horns that it would take a big wagon to haul, all of which were picked up on a space of 10 acres in the Rocky mountains. I have found a great many deer, elk and moose horns in the woods when I have been hunting. The horns of these species have no pith in them, as a cow horn has. When shed they drop off at the skull, leaving a small round knob, from which the new horn immediately begins to grow. When an animal sheds its horns the new ones begin to grow and are generally full grown by the 1st of September. Up to that time they are covered with velvet or short hair. The animals rub this off by contact with brush. You have probably seen, when you have been in the woods, small bushes that have been broken to pieces by the deer rubbing the velvet off their horns.—EDITOR.

WHITE SQUIRRELS ARE ALBINOS.

Enclosed find a newspaper clipping regarding the shooting of 2 white squirrels:

> Stanley Botens shot a pure white squirrel on Mt. Monroe, about 6 miles from this village. Though few specimens of this handsome little squirrel are found, this is the second killed in this vicinity this season. A few weeks ago Daniel Totten shot a white squirrel about half a mile from where the other was killed. Probably both animals were of the same family.—Cuba (N. Y.) *Patriot.*

I was surprised to hear of a pure white squirrel. Do they belong to the same class as white owls and white rabbits? It seems deplorable that a person should be so thoughtless and cruel as to murder such pretty creatures, especially when so rarely seen. I should like to read more about the white squirrel in the natural history department of RECREATION.

W. O. Isaacson, Corry, Pa.

ANSWER.

No, there is no such thing as a species of white squirrel. The animals mentioned in the clipping you sent were simply albino grey squirrels. Albinism occurs at rare intervals in nearly all wild animals and in many species of birds. You can find specimens of white squirrels, chickens, porcupines, chipmunks, flying squirrels, crows, prairie chickens, quails, grouse, hawks, etc., in almost any large museum. True albinos have pink eyes. These birds and animals appear without color simply because of the absence of coloring pigment in the blood or the hair of the animal. In other words, the albino is an accident. You may occasionally see albino people. These have white hair, eyebrows and eyelashes and pink eyes. I have a live white squirrel in my office, which is a beautiful and interesting pet. If you ever come to New York drop in and see him.—EDITOR.

MINK.

The mink is found in America, in Northern Europe and Asia. It is carnivorous and belongs to the weasel family. The mink of the Eastern United States is 12 to 18 inches in length, extremely slender, and has a long neck and small head. The color varies through light brown, brown and dark brown; the darker the pelt the greater its value.

These sly little animals live along the streams, feeding on fish, especially trout when they can be had, and on frogs, mice, muskrats and other small animals.

They are great ramblers in spring, when they will travel many miles in one night. Often they will go great distances from one stream to another.

Their breeding season commences about May 1st. The female is much smaller than the male, and has 4 to 6 young to a litter. She keeps them hidden until about half grown, lest the male destroy them. The best time to trap mink is in November; then they will take bait, while in December and January they will not notice it. The best way to capture them is to find their runs, where you can guide them into your traps without alarming them. Set your trap where they are certain to go, cover it with grass or leaves, and you are fairly sure to capture your game. There are apparently many more male than female mink.

R. K. Duxbury, Pine Plains, N. Y.

NATURAL HISTORY NOTES.

While in the woods just before the opening of the squirrel season I noticed several greys cutting in a hickory. Presently one came running down the tree with a nut in his mouth, passing within 8 or 10 feet of where I stood motionless. He eyed me attentively, evidently wondering what particular class of stump I represented. Finally he gave it up and dug a hole 5 or 6 inches deep in the soft mould. Into that he dropped the nut he had brought and covered it carefully, forcing down the earth with his nose as a dog buries a bone.

It occurred to me then that if the squirrel did not return for it there would be another young hickory growing next year. The nut would not germinate if left on the ground or under a thin covering of leaves. All who have tried to dig up a yearling hickory or oak know that the germ or seed must have been deeply buried in the first place. Possibly we owe much of our hardwood to the squirrels.

Walter Lusson, Ardmore, Pa.

Most assuredly we do, and this is another reason why we should not kill the squirrels. EDITOR.

In Ohio we have 3 classes of game hogs that kill game without regard to legal limit and utterly ignore all laws. I refer to hawks, owls and crows. The latter are the worst. They not only kill young birds but destroy vast numbers of eggs. They visit poultry yards and destroy eggs and untold numbers of young chickens and turkeys. Last summer one farmer here lost 35 turkeys in that way. When a hawk finds a flock of young quails he will follow until he gets the last bird. Hawks kill 3 times as many quails as all the hunters in the State. A bounty of 50 cents a head should be offered for hawks, owls and crows. It would in the end save thousands of dollars to farmers and double the supply of small game. S. W. Riggs, Sullivan, O.

The letters on skunk raising, in December Recreation, contain much that is news to me. I especially question the statement that skunks in captivity will give birth to several litters of young each year. I have raised these animals a number of years and never knew one to have more than one litter a season. The period of gestation is 9 weeks, and the young, at least when confined in yards, run with the mother 3 months. All hibernate in extremely cold weather. I have never known the males to destroy the young, and think it only occurs when they are driven to it through scarcity of food.

A. E. Kibbe, Mayville, N. Y.

While Cornelius Rusfeldt of Hawley, Minn., was going to the barn one morning recently he saw an eagle swoop down on some poultry in tall weeds. The bird became entangled in the weeds, and Rusfeldt succeeded in capturing it unhurt. It measures 7 feet from tip to tip of wing, is about one year old and has an insatiable appetite. It swallows whole the heads of blackbirds, etc., and greedily bolts feathers and large pieces of bone. The only thing it has so far refused to eat was a jack rabbit, going hungry 3 days rather than touch it. L. A. R., Hawley, Minn.

I had a strange experience not long ago which may interest some of your readers. In digging out a fox we had holed, we found, about 20 feet from the entrance of the burrow, a dead hedgehog, badly mangled. Beyond him lay another in even worse shape than the first. At the end of the hole we found the fox. He, too, was dead, and his pelt from head to feet was full of quills. He had evidently killed the hedgehogs, who, perhaps, had tried to take possession of the burrow, and had died from his wounds.

F. H. Pierce, South Londonderry, Vt.

My experience as a trapper leads me to believe the muskrat a strictly herbivorous animal. I have set traps near their runways baited with flesh of the muskrat, fish, fowls, etc., but never succeeded in catching a rat that way. If I bait with carrot or apple I have no difficulty in catching them. Their principal food is roots. They may differ in their habits in various places, but I am convinced that the muskrat in this section does not eat flesh.

A. L. Fritts, Olpe, Kan.

A yearly subscription to Recreation furnishes one of the most delightful, instructive, entertaining presents you can possibly give a man or boy who is interested in nature, in fishing, shooting, amateur photography; or, who is fond of the woods, the fields, the mountains, the lakes or the rivers.

Many of the presents which people give their friends afford pleasure only for a few days, or weeks. A subscription to Recreation means solid comfort a whole year. It reminds your friend 12 times during the year of your kindness and generosity. There are many men and women who for 5 years past have annually sent in long lists of names of friends, accompanied with a check in order that these friends might be made happy a whole year. Would it not be well for you to adopt this plan?

Try it and see how grateful the recipient will be.

No, I'm not well impressed with the house," said the prospective tenant. "The yard is frightfully small; there's hardly room for a single flower bed."

"Think so?" replied the agent; "but—er—mightn't you use folding flower beds?"
—Philadelphia Press.

Have you seen those beautiful gun racks, made by E. W. Stiles, of polished buffalo horns? They are useful, unique and attractive additions to a sportsman's den. For 5 subscriptions I will send you one of these racks.

"Oh, mamma, look at the rabbit!" exclaimed little Margie, as she watched the peculiar twinkle of the animal's features. "Every time he smells anything he stutters with his nose."—The Pilot.

A Laughlin Fountain Pen, listed at $3, for 3 yearly subscriptions to Recreation. Everyone knows the advantage of having a good fountain pen in his pocket, and this is one of that kind.

Do you want a rowboat? If so, send me 20 subscriptions. I will send you a boat listing at $20.

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Applications for membership and orders for badges should be addressed to Arthur F. Rice. Secretary, 23 W. 24th St., New York.

LOCAL WARDENS IN NEW YORK.

County.	Name of Warden.	Address.
New York,	Conrad L. Meyer,	46 W. Broadway.
Livingston	M. De La Vergne,	Lakeville.
"	K. S. Chamberlain,	Mt. Morris.
Nassau,	Willett Smith,	Freeport, L. I.
Albany,	C. D. Johnson,	Newtonville.
Broome,	John Sullivan,	Sanitaria Springs
"	R. R. Mathewson,	Binghamton.
Cayuga,	H. M. Haskell,	Weedsport.
Cortland,	J. A. Wood,	Cortland,
Chemung,	Fred. Uhle,	Hendy Creek,
"	M. A. Baker,	Elmira.
Erie,	E. P. Dorr,	103 D. S. Morgan Building, Buffalo.
"	Marvin H. Butler,	Morilla.
Essex,	W. H. Broughton,	Moriah.
Franklin,	Jas. Eccles,	St. Regis Falls.
	W. J. Martin,	McColloms.
Montgomery,	Charles W. Scharf,	Canajoharie.
Oneida,	J. M. Scoville,	Clinton.
Orange,	Wilson Crans,	Middletown.
	J. Hampton Kidd,	Newburgh.
Richmond.	Lewis Morris,	Port Richmond.
St. Lawrence,	Dr. B. W. Severance,	Gouverneur.
"	A. N. Clark,	Sevey.
Schenectady,	J. W. Furnside,	Schenectady.
Suffolk,	F. J. Fellows,	Central Islip, L. I.
	P. F. Tabor,	Orient, L. I.
Tioga,	Geo. Wood,	Owego.
Washington,	C. L. Allen,	Sandy Hill.
"	A. S. Temple,	Whitehall,
"	J. E Barber,	Dresden.
Westchester,	George Poth,	Pleasantville.
"	Chas. Seacor,	57 Pelham Road, New Rochelle.
"	E. G. Horton,	Pleasantville.
Essex,	H. E. Braman,	Keene Valley.
Dutchess, Columbia,	A. B. Miller,	Jackson's Corners,
Orange,	Thomas Harris,	Port Jervis.
Onondaga,	James Lush	Memphis.
Yates,	B. L. Wren,	Penn Yan.
"	Seymour Poineer,	Branch Port.
Dutchess,	Chas. H. DeLong,	Pawling.
"	Jacob Tompkins,	Billings.
Queens,	Gerard Van Nostrand,	Flushing, L. I.
"	W. S. Mygrant,	46 Elton Street, Brooklyn.
"	P. A. Geepel,	473 Grand Ave., Astoria, L. I.
"	L. B. Drowne,	119 Somers Street, Brooklyn.
Ulster,	M. A. DeVall,	The Corners.
"	Wm. S. Mead,	Woodstock.
Jefferson,	C. E. Van Order,	Watertown.
Herkimer,	D. F. Sperry,	Old Forge.
Rensselaer,	Benj. McNary,	Bath.
Oswego,	J. E. Manning,	154 West Utica St.
Putnam,	H. L. Brady,	Mahopac Falls.
Schuyler,	G. C. Fordham,	Watkins.
Allegany,	G. A. Thomas,	Belvidere.
Schoharie,	O. E. Eigen,	Sharon Springs.

LOCAL WARDENS IN OHIO.

Stark,	A. Dangeleisen,	Massillon.
Franklin,	Brook L. Terry,	208 Woodward Av., Columbus.
Cuyahoga,	A. W. Hitch,	161 Osborn St., Cleveland.
Clark,	Fred C. Ross,	169 W. Main St., Springfield.
Erie,	David Sutton,	418 Jackson St Sandusky.
Fulton,	L. C. Berry,	Swanton.
Allen,	S. W. Knisely,	Lima.
Hamilton,	W. C. Rippey	4465 Eastern Ave., Cincinnati.
Knox,	Grant Phillips,	Mt. Vernon.
Lorain,	T. J. Bates,	Elyria.
Ottawa,	Frank B. Shirley,	Lakeside.
Muskingum,	Frank D. Abell,	Zanesville.
Scioto,	J. F. Kelley,	Portsmouth.
Highland,	James G. Lyle,	Hillsboro.

LOCAL WARDENS IN CONNECTICUT.

County.	Name of Warden.	Address.
Fairfield,	George B. Bliss.	2 Park Row, Stamford, Ct.
	Harvey C. Went,	11 Park St., Bridgeport, Ct.
Fairfield,	Samuel Waklee,	Box 373, Stratford.
Litchfield,	Dr. H. L. Ross,	P. O. Box 100, Canaan, Ct.
Middlesex,	Sandford Brainerd,	Ivoryton.
New Haven,	Wilbur E. Beach,	318 Chapel Street, New Haven, Ct.
"	D. J. Ryan,	188 Elizabeth St., Derby.

LOCAL WARDENS IN MASSACHUSETTS.

Norfolk,	Orlando McKenzie,	Norfolk.
"	J. J. Blick,	Wrentham.
"	S. W. Fuller,	East Milton.
Suffolk,	Capt. W. J. Stone.	4 Tremont Row, Boston.

LOCAL WARDENS IN NEW JERSEY.

Mercer,	Jos. Ashmore,	124 Taylor St., Trenton
Mercer.	Edw. Vanderbilt,	Dentzville, Trenton.
"	Roland Mitchell,	739 Centre St., Trenton.
Morris,	Joseph Pellet,	Pompton Plains.
"	Chas. W. Blake,	Dover.
"	Francis E. Cook,	Butler.
"	Calone Orr,	Hibernia.
Somerset,	G. E. Morris,	Somerville.
Sussex,	Isaac D. Williams,	Branchville.
Union,	A. H. Miller,	Cranford.
	C. M. Hawkins,	Roselle.
Warren,	Jacob Young, Reuben Warner,	Phillipsburg.
Monmouth.	Dory-Hunt,	Wanague.

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Jefferson,	John Noll,	Sykesville.
Perry,	Samuel Sundy,	Lebo.
Warren.	F. P. Sweet,	Goodwill Hill.
Juniata,	Clifford Singer,	Oakland Mills.
Venango,	G. D. Benedict	Pleasantville.
Potter	Ira Murphy,	Coudersport
"	Wiley Barrows,	Austin.
"	Chas. Barrows,	Austin.
Crawford,	Jasper Tillotson,	Tillotson.
"	Geo. T. Meyers,	Titusville.
"	J. B. Lamb,	Buel.
Cambria,	W. H. Lambert,	720 Coleman Ave., Johnstown.
Butler,	F. J. Forquer,	Murrinsville.
Allegheny,	S. H. Allen,	Natrona.
Beaver,	N. H. Covert,	Beaver Falls.
"	W. R. Keefer,	"
McKean,	C. A. Duke,	Duke Center.
"	L. P. Fessenden,	G anere.
Lack,	Wm. Weir,	Moosic.
Carbon.	Asa D. Hontz,	East Mauch Chunk
Cumberland,	J. C. Gill,	Mechanicsburg.
Wyoming,	Cyrus Walter,	Tunkhannock.
Tioga,	E. B. Beaumont, Jr.,	Lawrenceville.
"	G. H. Simmons,	Westfield.
Lycoming,	Jas. J. Brennan,	Oval.
"	B. D. Kurtz,	Cammal.
Delaware,	Walter Lusson,	Ardmore
Montgomery,	L. C. Parsons.	Academy.
Bradford,	Geo. B. Loop,	Sayre.
Clarion,	Isaac Keener,	New Bethlehem.
Cameron,	Harry Hemphill,	Emporium.

LOCAL WARDENS IN MICHIGAN.

Ottawa,	W. H. Dunham,	Drenthe.
Kalamazoo,	C. E. Miller,	Augusta.
Berrien,	W. A. Palmer,	Buchanan.
Cass.	Thomas Dewey.	Dowagiac.

LOCAL WARDENS IN VIRGINIA.

Mecklenburg,	J. H. Ogburn,	South Hill.
King William	N. H. Montague,	Palls.
Smythe,	J. M. Hughes,	Chatham Hill.
King & Queen,	R. D. Bates,	Newtown.
Louisa,	J. P. Harris,	Applegrove.
Henrico,	W. J. Lynham,	412 W. Marshall Richmond.
East Rockingham,	E. J. Carickhoff,	Harrisonburg.

LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	S. N. Leek, F. L. Peterson,	Jackson.
Carbon,	Kirk Dyer,	Medicine Bow.

County.	Name of Warden.	Address.
Big Horn,	E. E. Van Dyke,	Clark.
Laramie,	Martin Breither.	Cheyenne.

LOCAL WARDENS IN TENNESSEE.

Sumner,	W. G. Harris,	Gallatin
Stewart,	John H. Lory,	Bear Spring.
Robertson,	C. C. Bell,	Springfield.
Montgomery,	P. W. Humphrey,	Clarksville.

LOCAL WARDENS IN NEBRASKA.

Hall,	E. C. Statler,	Grand Island

LOCAL WARDENS IN NEW HAMPSHIRE.

Cheschire,	S. C. Ellis,	Keene.
Sullivan,	G. A. Blake,	Lempster.
"	J. W. Davidson,	Charlestown.

LOCAL WARDENS IN VERMONT.

Rutland,	Wm. J. Liddle,.	Box 281, Fair Haven
Windsor,	F. A. Tarbell	West Bridgewater.
Orleans,	E. G. Muloton	Derby Line
Chittenden,	C. C. Manley,	Melton.

LOCAL WARDENS IN ILLINOIS.

Rock Island,	D. M. Slottard,	12th ave. and 17th St.. Moline.

LOCAL WARDENS IN OKLAHOMA.

Kiowa and Comanche Nation,	A. C. Cooper.	Ft. Sill.

LOCAL WARDENS IN IOWA.

Clinton,	D. L. Pascol,	Grand Mound.
Pattawattamie,	Dr. C. Engel,	Crescent.

LOCAL WARDENS IN WASHINGTON.

Okanogan,	James West,	Methow.
Stevens Co.,	Jacob Martin,	Newport.

LOCAL CHAPTERS.

Albert Lea, Minn.,	H. A. Morgan,	Rear Warden
Angelica, N. Y.,	C. A. Lathrop,	"
Augusta, Mont.,	H. Sherman,	"
Austin, Pa.,	W. S. Warner,	"
Boston, Mass.,	Capt. W. I. Stone,	"
Buffalo, N. Y.,	H. C. Gardiner,	"
Cammal, Pa.,	B. A. Ovenshire.	"
Charlestown, N. H.,	W. M. Buswell,	"
Cheyenne, Wyo.,	J. Hennessy.	"
Coudersport, Pa.,	I. L. Murphy,	"
Cresco, Iowa.,	J, L. Platt,	"
Davis, W. Va.,	J. Heltzen,	"
Dowagiac, Mich.,	W. F. Hoyt,	"
East Mauch Chunk, Pa.,	E. F. Pry,	"
Evansville, Ind.,	F. M. Gilbert,	"
Fontanet, Ind.,	W. H. Perry,	"
Ft. Wayne, Ind.,	W. L. Waltemarth	"
Hopkinsville, Ky.,	Hunter Wood,	"
Indianapolis, Ind.,	Joseph E. Bell,	"
Jerome, Ariz.,	Dr. L. A. Hawkins,	"
Johnsonburg, Pa.,	W. J. Stebbins,	"
Kalispell, Mont.,	John Eakright,	"
Keene, N. H.,	F. P. Beedle,	"
Lake Co., Ind.,	Dr. R. C. Mackey,	"
Loganpsort, Ind.,	E. B. McConnell,	"
Ludington, Mich.,	G. R. Cartier,	"
Mechanicsburg, Pa.,	Dr. J H. Swartz.	"
Minturn, Colo.,	A. B. Walter,	"
New Albany, Ind.,	Dr. J. F. Weathers,	"
New Bethlehem, Pa.,	Isaac Keener,	"
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There are thousands of men in the United States who should be life members. Why don't they join? Will some one please take a club and wake them up?

GAME MARKET GONE.

Chicago *Herald*, Jan. 19.

Game is scarce in Chicago. Stocks of such kinds as are offered are light, and prices are at a point which virtually checks general consumption. Up to 1899 Chicago was one of the principal game markets of the world. From more than a score of the States and Territories came the choicest victims of the hunter, and that which could not be secured in this city in the way of game was certainly not obtainable elsewhere.

Venison sold here many years prior to 1900 at a price relatively less than that of the same cuts of beef, while quails seldom went above $1.25 to $1.50 a dozen, at which price they are cheaper than any other edible fowls, wild or tame. Now the meager offerings of venison are held at about 30 cents a pound, an advance of almost 100 per cent. on the average prices of former years.

The few quails exposed for sale are quoted at $3 a dozen for the best stock, a few

No. 2 being sold as low as $2. Prairie chickens usually sold at $4 to $6 a dozen, and were well worth the money. During the present season they have sold at $9 to $10, with the supply extremely limited. Ruffed grouse sold this year at $11 to $12 a dozen. Formerly they were held at about the same price as were prairie chickens, and few have been offered as compared with former years.

The stringency of the game laws of almost all the States has brought this change and wrought havoc with the trade. During the present season the combined holdings of the game houses of the city often did not amount to the stock formerly carried by a single firm. To these laws, do the dealers attribute the ruin of Chicago's game market. The statute preventing the shipment beyond the limit of the State is especially blamed for the disaster to the business.

And the League did it. Verily the League is great. Why not join the League and invite your friends to do so?

Send your application to Arthur F. Rice, Sec'y, 23 West 24th Street, N. Y.

A GOOD SUGGESTION.

Col. E. C. Farrington, Secretary of the Maine Fish and Game Protective Association, in his annual report says:

> "I desire to call your attention to the great work being done by the League of American Sportsmen, of which Mr. G. O. Shields, editor of RECREATION, is president, and of which President Roosevelt is a prominent member. It seems to be the only organization to which we can look for the saving of our birds and wild animals. It not only has, owing to the character of its organization, large influence in our National councils, but its efforts in the different States are proving of the greatest benefit in suppressing the illegal slaughter and illegal selling of fish and game. This League ought to be sustained, and Maine sportsmen and lovers of the dumb creation should aid in every possible way in its work. It costs but $1 to join the association, and thousands of our citizens could, without feeling the burden, help it, materially and in influence, by becoming members of that National League. I suggest for your consideration that it would be wise to so modify our charter as to permit this association to become members of that body, and thus join our efforts with those of the League of American Sportsmen."

I wonder if the sportsmen in general notice how few women are wearing plumage of song birds on their hats this winter. In my travels I have scarcely seen one. I have seen a few gulls, or tern on the hats of women who are not up to date. The absence of bird plumage on hats is due largely to the work of the League. The Audubon Societies and the American Ornithological Union have also done good work in this direction, but League members can claim a large share of the honors. However, we do not care so much for this as for the fact that the traffic in bird plumage has been practically squelched, and as a result I hear from various portions of the country that birds are rapidly increasing.

When I was at my dear old home in Brunswick county, Virginia, my sister and I decided to join the League of American Sportsmen. We believe in protecting the game and the song birds. If we were men we would be game wardens; but we are only 2 resolute women who want to do what we can for an excellent and deserving cause, so I send herewith $2. Please initiate us into membership with this noble fraternity.

Birds are not numerous in this section, but I have never known them more abundant in Brunswick county, Va.

Jennie F. Buford, Winston Salem, N. C.

The League is making a strong effort to have the present Congress pass a bill to stop the wholesale slaughter of game in Alaska; another, to make all the timber reserves in the Western States national parks, and to stop all hunting therein; another to extend the Yellowstone National Park South and East to include adjacent timber reserves and to provide adequate winter range for the elk, whose home is in the park. As soon as these bills are in proper shape for effective work, a circular letter will be sent to all League members asking them to aid in securing the passage thereof.

The last form of this issue of RECREATION goes to press a few days before the annual meeting of the League in Indianapolis, so it is impossible to give any report of the proceedings in the March number, but I hope to have this ready for the April number. At this writing there is a prospect of a large attendance at the meeting and there are a number of important measures to be acted on; so the report of the meeting will no doubt be full of interest for all members.

FORESTRY.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

FOREST USES DEFINED.

New York State has been charged by a set of New York City bankers with having violated her Constitution by establishing the Demonstration Forest, which the College of Forestry was to manage, and the methods of the College have been criticised, apparently for the sole reason that they were unknown to these gentlemen and to certain newspaper writers, who therefore assume that the methods must be wrong. Concerning this matter the Director of the College of Forestry, himself a professional forester, says, in his latest report for the year 1901:

Forestry is a technical art, wholly utilitarian, and not, except incidentally, concerned in esthetic aspects of the woods. It is engaged in utilizing the soil for the production of wood crops, and thereby of the highest revenue attainable. To make the soil produce the largest quantity of the most useful wood per acre is the foremost aim of forestry. It is in this respect the twin sister of agriculture, wood material being the object of the forester, food materials of the farmer.

There may be in addition secondary objects to be attained by a forest growth, and sometimes these secondary objects may be even of main importance; as, for instance, where on steep, Alpine mountain slopes a forest cover is to be maintained in order to prevent erosion and rapid surface drainage of waters—so-called protection forests; or where the owner has decided to set aside his forest property as a game preserve or recreation ground, such as the State Forest Preserve is at present—a luxury forest.

Not that these secondary objects need to exclude the primary object of forest growth, namely, the production of useful material; but in these 2 cases the methods of management will differ perhaps somewhat from those employed in the business forest. Nor does the manager of a forest managed for business purposes, namely, wood production and revenue, necessarily neglect any of the other benefits a forest may bring as far as his main object permits or makes desirable. The German forests are managed with due regard to all 3 purposes, the business side taking, to be sure, precedence.

In an article on "Adirondack Forestry Problems," printed in the report of the New York State Forest, Fish and Game Commission for 1898, I pointed out in more or less detail what differences in management there would be, according to whether the protective, the luxury or the business object is to be made the prominent one.

That the College Forest was set aside and was to be managed primarily as a business forest will appear from the reading of the law which instituted it, to show "the scientific management and use of forests, their regulation and administration, the production, harvesting and reproduction of wood crops and earning a revenue therefrom." This last injunction leaves no doubt as to the intention of the legislator; hence the entire management of the College has been based on the business aspect of the proposition.

To earn a revenue necessitates the sale of something; hence the law provides that the University, having "title, possession and control of the land, shall plant, raise, cut and sell timber at such times and of such species and quantities and in such manner as it may deem best."

This language fully and explicitly describes the business of the forester, and is being explicitly followed by the College as manager of this property. The forester, then, is a harvester, as well as a sower or planter. The crude idea entertained by the ignorant, that he is to cut out dead trees and trim branches, which he can not sell, and clear out undesirable undergrowth, which would not only be expensive but often bad forestry, can be put into practice only in "luxury forests," in which the owner is willing to spend his substance for the sake of gratifying his pleasure.

To earn a revenue, the old crop, nature's crop, must be harvested and sold in such a manner and at such prices as to leave a margin. The difficulties which surround this requirement have been discussed at length in previous reports. It was there pointed out that the forester, who can not, like the lumberman, merely harvest the most profitable and salable portions of nature's crop, culling out the desirable, leaving the undesirable, but must secure the reproduction of this or rather of a better crop, is at a disadvantage in having to provide for means of disposing of the inferior material, the offal and *debris*, which would encumber the ground after a logging operation and would interfere with the growth he must often cut more than the logger, if he wishes to fulfill his main duty of replacing the old by a better young crop.

Thorough utilization of all portions of the crop, which the lumbermen can avoid, if unprofitable, is as much an obligation of the forester as reproduction of the crop, if not for economic then for silvicultural reasons. Hence, when a tree is felled, not only the body, which makes logs, but as far as practicable the branchwood and brush, the crooked, misshapen and half rotten parts should be disposed of; a difficult financial problem where wood is plentiful and no market for such material exists.

Working in hardwood, as in the College Forest, this *debris,* or inferior material, represents 2 to 3 times in bulk what the log material furnishes. Hence, the first and main concern of the management was to secure a market for this part of the harvest, as well as for the logs. The only known means of profitably utilizing large quantities of cordwood, away from dense population, and when the cost of transportation forbids its sale as firewood, is in its conversion into wood alcohol, acetic acid and charcoal. Arrangements were therefore made with the Brooklyn Cooperage Co. to establish factories for the manufacture of logs into staves and of cordwood into wood alcohol, and for building a railroad to transport the materials from the woods to the factories.

This combination, in which almost all the material of the felled trees is turned to best use, instead of wasting, as the logger usually does, 2-3 to ¾ in the woods, is the first of its kind established in the United States, since usually the manufacturers of wood alcohol use the body-wood also in their manufacture, and the College felt rather proud of its achievement in bringing about this economic reform in the use of the wood crop. Curiously enough, an attempt has been made by ignorant or ill disposed or otherwise improperly interested persons to discredit this effort at thorough utilization.

The application of forestry or silviculture to our culled and mismanaged woodlands throughout the United States as a business proposition is in most cases possible only where the means exist of utilizing this inferior material; for the cash which would otherwise have to be spent in making room for the young crop will surely exceed reasonable proportions, or else the young crop will be inferior or suffer damage.

In those woods from which the valuable conifers have not as yet been culled, it may be possible and good business policy merely to remove the salable part of conifers with less damage, if possible, than the culling process usually brings with it, and to defer the application of positive silviculture to some later period; but in the culled hardwoods no silvicultural methods designed to reproduce a better crop can be successful which do not take care of the *debris.*

I hope I have made clear to any intelligent reader that forestry consists in harvesting as well as in replacing wood crops; that in this obligation to provide for a new crop, and almost alone in this, does the forester differ from the lumberman.

Having been successful in securing a market for most of the material to be harvested, the next question was as to the manner of harvesting and reproducing the crop, the choice of the silvicultural system, namely, the method by which the crop is to be reproduced.

There are many variations in method possible, from the simple clearing and artificial replanting, through various degrees of gradual removal and natural reproduction to the so-called "selection forest," in which the harvest is made continuous by slow removal and the reproduction, by natural seeding, is also continuous. Among practitioners no one of these methods is recognized as the only proper one. Each has its advocates and objectors; each has its advantages and disadvantages; each has its place under certain given conditions. It is only the less experienced who clings to one prescription; the man of wider judgment varies it according to conditions.

The choice of method is partly influenced by natural conditions, partly by the objects and conditions of the owner. In a protective forest and in a luxury forest, the selection system, which culls here and there and leaves the forest as a whole undisturbed, may be most satisfactory on account of the objects in view, which necessitate a constant soil cover of grown timber; but in a business forest, which is managed for revenue, the first or any of the intermediate methods of gradual removal, or a combination of natural and artificial means of producing the crop may be preferable, because cheaper or more successful in final results of a useful timber crop.

Among the younger generation of foresters there seems to be a belief that the selection system or some system of gradual removal and natural regeneration alone is to be advocated. On the other hand, an old German practitioner, a past master of the art, sums up his observations and experiences regarding the artificial and natural regeneration as follows:

"Fortunately there was a time when it was supposed to be the best method to clear away the old conifer and oak stands and replace them by hand. From this time date the dense 20, 30, 40, 50 year old pole-woods of spruce, pine and oak, which we can exhibit with satisfaction in many districts. They are the veritable bonanzas of the future, which will furnish more valuable material than our older stands, resulting from methods of natural regeneration. Clearing, followed by planting and sowing, deserves, with a few exceptions, preference over natural regeneration. Besides, this latter method is much more expensive indirectly in cost of logging and loss of time and young growth than most practitioners think."

Finally, in a business forest, the relative cost of each method is determinative, unless strong reasons can be brought to make the choice of the more expensive method imperative.

The clearing method, with artificial planting, permits statement of approximate cost. The harvesting is concentrated and the elements of its cost can be readily figured, as also can the cost of planting; and a complete success of the young crop can almost be forced. With the gradual removal and natural seeding methods an area 10, 20, 30 times as large must be taken into operation simultaneously, to secure the same felling budget annually; that is to say, means of transportation for the harvested crop must be spread and must be maintained over a much larger area in order to secure the single annual felling budget by gradual removal during a given number of years. Here is, then, a first investment to be made which would prevent the manager, who has no capital to invest, from adopting such a method, even if he should recognize it otherwise as best.

The larger the area to be harvested over, the more expensive does the harvest become; how much in proportion it would be difficult to figure, even under given conditions, but every logger knows that the difference is considerable and will go far to offset the direct money outlay for planting.

Finally, the result, in a natural young crop, is by no means so assured as the theorist who discusses the natural regeneration methods on paper takes for granted. It is dependent on many uncontrollable or only partially controllable circumstances, among which the occurrence of seed years, proper weather and especially proper soil condition at time of seeding and germination, and proper light conditions during early development should be mentioned. The result, especially in a mixed forest, with species of unequal value, even in the most skillful hands, is not so absolute as with artificial reproduction, which practically is controlled by the purse alone.

The management of the College Forest, having its working funds curtailed to the lowest limits, and having no capital to invest in permanent systems of transportation, was prevented by financial considerations at the outset from inaugurating any system of gradual removal, even if it had considered such a system, under the conditions, desirable. There were, however, good silvicultural reasons why, for that part of the property which it had first to take into operation, another system was preferable.

It stands to reason that in the systems of natural regeneration only those species can be reproduced which are present in sufficient numbers; hence, if we wish to have in the new crop species which are absent or poorly represented, we must resort to artificial means. In the Wawbeek district not only has the most valuable part of nature's original crop, the white pine and spruce, been previously most severely culled, leaving few or no trees that could be utilized as seed trees, but the young volunteer growth of these species is poorly represented or, as in the case of the white pine, mostly absent.

These species which are recognized as most desirable would have to be, therefore, supplied artificially. Hence a mixed system has been adopted, which consists in concentrated logging, in which all young volunteer growth and sapling timber of promise is saved as far as practicable, and the valuable conifers are planted in, or sown, as the case may be, at the rate of 500 to 1,500 plants, according to needs. Moreover, clumps of trees have been left on elevations and otherwise scattered over the area, to act as seed trees to fill in the crop with hardwoods and native spruces. Besides, as the annual cuts are not strung together, but widely separated, the margins of the cut area also provide seeds for that purpose for several years. In other words, a mixed natural and artificial system has been chosen, which promises most success in the reproduction, and probably at the least expenditure; the result expected being a mixed forest of hardwoods and conifers, in which the latter are given the preference.

The College has thus far cut over about 300 acres and planted 255 acres, and has large nurseries, containing nearly 2,000,000 seedlings, to be used in planting wherever the necessity arises. Its main trouble is the deficiency of funds to carry on its business satisfactorily.

When you are through with your rifle or shot gun for the season where will you keep it? Would you not like a handsome gun rack to hold it? If so, send me 5 yearly subscription to RECREATION and I will send you such a rack, made of polished buffalo horns. It will not only afford a convenient resting place for your gun, out of harm's way, but is an attractive ornament to a wall.

PURE AND IMPURE FOOD.

"What a Man Eats He Is."

Edited by C. F. Langworthy, Ph. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

PREPARATION AND FOOD VALUE OF CONDENSED MILK.

I find Recreation's Pure Food department exceedingly interesting and instructive. So far, olive oil and condensed milk, both important articles of food, especially to persons suffering with pulmonary diseases, have not been discussed in these columns.

I believe an account of the methods of preparing these articles would meet with a hearty welcome from many of your readers.

I have used Borden's condensed milk since seeing it advertised in Recreation, and find it far more convenient and reliable in the South than fresh milk.

But questions like these arise: Does it come from clean and healthy cows? Is it not contaminated by foul barns or milk houses? Is the canning of it properly conducted, or is it managed like some fish and tomato canneries we know of, a sight or smell of which is quite sufficient to cure anyone of further taste for goods therein handled? What your readers want is the truth about this matter, as they got it about the Marlin rifles.

If this is asking too much of Recreation, I can only say that Recreation has taught us to expect great things of it.

W. G. Jennison, Chiply, Fla.

ANSWER.

Condensed milk is prepared from fresh milk by evaporating the water present, sugar being added as a preservative. Evaporated milk is prepared in much the same way, except that less water is driven off and sugar is not added. The composition of milk, condensed milk (sweetened), and evaporated milk (unsweetened) follows:

Percentage composition of milk is: Water 87; protein, 3.3; fat 4; carbohydrates 5; ash 7. Its fuel value is 325 calories a pound.

Condensed milk (sweetened): Water 26.9; protein 8.8; fat 8.3; carbohydrates 54.1; ash 1.90. Fuel value 1,520 calories a pound.

Evaporated milk (unsweetened): Water 68.2; protein 9.6; fat 9.3; carbohydrates 11.2; ash 1.7. Fuel value 780 calories a pound.

It will be seen that in proportion to its bulk condensed milk is much more nutritious than fresh milk. As ordinarily used it is diluted with water until it resembles more or less closely the original milk from which it was made, except that it is sweeter. Like all milk it is a valuable food containing protein for building and repairing body tissue, and furnishing energy for internal and external work. When fed to infants, condensed milk should always be diluted; after the second month barley gruel should be added to the diluted milk.

Condensed milk and evaporated milk are sterilized in the process of manufacture, and if properly made are much less liable to communicate bacteria to man than fresh milk. Of course if condensed milk is not properly handled after the can is opened it may become contaminated. I have no personal knowledge of the methods of manufacture followed by the firm referred to. It is probable that all reputable manufacturers exercise proper precautions in preparing their goods. Appended is a letter from the Borden Co.—Editor.

New York City, July 1, 1901.

All the modern sanitary and hygienic rules and regulations governing the production and handling of milk in every form were originated by this company over 40 years ago, and improved from time to time as experience presented the opportunity. The regulations of boards of health, and the demands of physicians when reasonable, we have studied to profit wherever possible. Our product is indorsed by the leading physicians of this country whose specialty is the feeding of children. They do not indorse the Eagle Brand without careful investigation of the matter. We also refer you to the fact that we have taken the highest award at every exhibit, which award covers not only the finished product, but the methods used.

Borden's Condensed Milk Co.,

THE CHINA RELIEF EXPEDITION.

The report of the Commissary-General to the Secretary of War, which has recently been issued, contains much interesting information regarding the food of the United States troops on the relief expedition to Pekin during the recent Chinese war. One of the officers says:

"It is borne in on the campaigner that the eatables and drinkables, if not the most important, are at least the most continuously insistent of the indispensables. Of these there was an ample supply at Tientsin from the time of the arrival there of the first American troops, and they included not only the ordinary components of the ration, but most of the delicacies classed as fancy groceries. Ginger ale and bottled waters were in abundance, and plenty was the order of the day. The food of our soldiers exceeded in quantity, quality and variety that of any of the allied forces, as was the comment of all foreign officers under whose notice it fell. When the march to Pekin was taken up, however, the fare was less generous. All supplies directly accompanying the troops had to be carried in wagons or on pack mules, and of these means of transportation the command was short, having sufficient only for carrying 3 days' rations and 100 rounds of reserve ammunition per man; but, in common with the other contingents, we had a reserve supply of rations and ammunition following on the junks by the Peiho, of which the course was in the general direction of the march as far as Tung Chow, within 13 miles of Pekin. Such luxuries as tents, however, are out of the question.

"The ration thus carried was reduced to about 3 pounds per man, the full ration in bulk with its packing cases weighing about 5 pounds per man, and comprised the staples: Bacon, hard bread, sugar, coffee, rice, beans and condiments. Even so, it was better than was carried for the troops of any other nation. Within 3 days after the arrival at Pekin fancy groceries and bottled waters appeared in the American commissary, and within a week there was an abundance of these for all."

Regarding the vegetable rations it is stated that:

"Some of the vegetable ration was carried and issued *en route*. The country, however, furnished a bountiful supply of vegetables, egg plant, green corn, sweet potatoes, beans, lettuce, etc.

Another officer says:

"In my mind there were none who had such excellent or abundant a supply as the Americans. The Japs had rice, bread, and dried fish and tea, which they supplemented by the use of the sheep and cattle the country produced. They also had American canned meats, but they seemed to be an emergency diet.

"The British white troops had a ration similar to ours in quality and quantity, but not so varied or flexible. They used tea instead of coffee. The British Indian troops had about ¾ of a pound of atta, or flour; about 1 pound of rice; 1 gill of ghee, or vegetable oil; salt, and once a week a pound of fresh meat, bone and all."

FORCING ASPARAGUS.

A satisfactory method of forcing asparagus in the field has been reported by the Missouri Agricultural Experiment Station. This consists in supplying the plants in the open field with the heat required for growth by means of steam. The method is as follows: Trenches were made by running a plow twice in a place between the rows of asparagus plants so as to throw the soil on them. The trenches were then made uniform by means of a spade. When finished they were 3 or 4 inches lower than the crown of the plants. They were covered with 12 inch boards resting on 4 inch blocks on either side of the trenches, thus forming tunnels between the rows. The boards were covered with 2 or 3 inches of soil, and over the whole bed 5 or 6 inches of horse manure was placed. Steam from a boiler was carried to the end of the central tunnel by a steam pipe, and from there forced into the various tunnels through a steam hose. The steam, coming into direct contact with the soil, penetrates it readily, and thereby warms the whole bed uniformly to the desired temperature, keeps the soil moist, and maintains a continuous fermentation of the manure mulch. It was found that about 5 minutes at a time was as long as steam could be forced into the tunnels without danger of injuring the plants. In the first test of the method at the station, 6 rows, 4 feet apart and 50 feet long, were prepared for forcing. Steam was first applied November 14. It was discharged in each tunnel not over 5 minutes at a time, about an hour being required to heat the bed to a temperature of 60 degrees Fahrenheit. After the first day the bed was steamed on an average of twice in 3 days, and only for 5 minutes for each tunnel. The first asparagus was cut 10 days after steaming was begun. It was as large as that ordinarily produced in spring and much more crisp. Cuttings were made almost daily for a month, when the growth became weak. The second test was begun December 16, and carried out as in the first test. The bed prepared for forcing was 25 by 74 feet. The first cutting was made 2 weeks after the first steaming. The time of cutting was less regular than in the first test, and was prolonged about 2 months. The weather being colder, somewhat more steam was required than in the first test. The plants forced were allowed to grow without cutting during the following summer, and the next spring's growth showed that one season's growth after forcing was sufficient for the plants to regain their normal vigor. A test was also made with a bed 25 feet square to determine the quantity of coal necessary to force a given area of asparagus and to determine the value of the product. The steam was first used December 29, the first asparagus cut January 12, and cutting was continued until February 25. Steam was forced into the tunnels a total of 60¼ hours; 2,308 pounds of coal, valued at $1.82, were used in heating the bed. The yield was 162 bunches (80 pounds) valued at 10 to 20 cents a bunch.

ANOTHER WILD ANIMAL BOOK.

E. T. Seton has given the world another great book. The title of this is, "Lives of the Hunted," and it deals in Mr. Seton's usual effective way with the life history, the trials, tribulations, joys and sufferings of certain wild animals and birds with which Mr. Seton has become acquainted in his ramblings.

The most interesting and important story in the book is that of Krag, the Kootenay ram, the story of whose death was told in July RECREATION, 1897. Mr. Seton has gone back to the baby days of old Krag, has rambled under his family tree, and has then visited and associated with Krag from that day to the day of his death. The story is told with all the pathos and dramatic force of the trained artist-naturalist, and the ardent lover of all wild creatures. Sandy MacDougall, who so relentlessly pursued old Krag, and who finally met his death as the result of vile treachery, is very properly consigned, in this story, to a bed of suffering for many months, and his bones are finally found moldering in the old shack in which he lived. Readers of RECREATION will be delighted to go away back on the trail, high up in the Cascade mountains, and meet old Krag in the heyday of his existence. They will follow him through the various stages of his life and through the tragic scenes that finally ended in his death, with feelings of the sincerest pity.

Other stories in Seton's latest book are, "A Street Troubadour," "Johnny Bear," "The Mother Teal," "Chink," "The Kangaroo Rat," "Tim," "The Story of a Coyote," and "Why the Chickadee Goes Crazy Once a Year." No one can read any one of these stories without feeling nearer to nature and without loving its wild creatures more tenderly than ever before. The book is illustrated in the happy and artistic manner for which Mr. Seton has been famous many years. Two of the illustrations are shown on pages 186 and 187 of this issue, and there are 100 others in the book equally beautiful and interesting.

A FOREST BOOK.

Anyone who likes rambling in books as well as rambling in the woods themselves can profitably while away a lazy hour with "Forest Trees and Forest Scenery," a dainty little booklet by G. F. Schwarz, of somewhat over 3,000 lines and 26 pretty pictures.

The object of the book is to bring out the esthetic aspects of a few forest trees and of forest scenery of different kinds, pointing out the elements of beauty with a considerable amount of poetic sentiment and reasonable accuracy of observation, reminding us of the style of Thoreau. The book is divided into 6 chapters. The first discusses a few broadleaf trees and conebearers; the second chapter the minor vegetation; the third explains the forest types found in the United States. Two chapters are devoted to a development of the character of broadleaf forests and coniferous forests. The last chapter, on "The Artificial Forests of Europe," is by all means the best, explaining with fine perception and appreciation the difference esthetically between the wild woods and the cultivated forest, and incidentally making proper distinction between our National and State Parks and Forest Reserves, which latter are to serve mainly utilitarian purposes, with the esthetic value secondary. Published by the Grafton Press, New York.

"Photography as a Fine Art," by Charles H. Caffin, will delight all who appreciate the pictorial possibilities of the camera understandingly used. Those still willing to call any photograph a picture will find in the book abundant reason for more discrimination. Mr. Caffin has selected 100 examples of the best work of Stieglitz, Käsebier, Keiley, Eugene, Dyer, White, Steichen and others. On these he comments instructively, pointing out wherein each, in his opinion, reaches or falls short of true art. A study of the collection will profit the amateur who desires his work to be an expression of artistic individuality.

The publishers, Doubleday, Page & Co., New York, will send the book postpaid to any address on approval, to be paid for or returned at the recipient's option. The price is $3.

"The Road to Frontenac," by Samuel Merwin, which has been running serially in Leslie's Monthly Magazine, is now published in book form by Doubleday, Page & Co., New York. The price of this volume is $1.50, and the book will be sent postpaid to any address on approval, to be paid for if satisfactory, or to be returned in case it is not wanted after examination.

"Highways and Byways in the Lake District," by A. G. Bradley, with illustrations by Joseph Pennell, is from the press of Macmillan & Co., New York, and is similar in treatment to "Highways and Byways in Normandy," published by the same house about a year ago. It forms an interesting addition to the extensive literature of the English lake region.

EDITOR'S CORNER.

DEATH OF A GREAT WORKER.

The League of American Sportsmen has sustained a great loss in the death of Albert E. Pond, which occurred at his home in this city, Jan. 16, from pneumonia. He was Chief Warden of the New York division, and in that capacity he proved for 4 years one of the most valuable workers the cause of game protection has ever had. He was one of the few men I could always rely on to do whatever I asked him to do. If I called a meeting of a committee or of League officers I could invariably count on Mr. Pond as one of the men who would be present. If I appointed him on any special committee to do any piece of work, I knew it would be done, and it always was done promptly and effectively. If I had a case in any of the courts against a game law violator Mr. Pond was always at my elbow to give me moral support. If I needed money to carry on this work Mr. Pond was always ready to contribute his share of it. If it became necessary for a few League officers to go anywhere in the United States to appoint any meeting or to do any special piece of work Mr. Pond was always the first man to volunteer or to respond to an invitation to go.

Throughout all his administration of the affairs of the New York division, he persistently declined to receive a dollar of the funds accruing from memberships in this State, to which he was entitled. He paid all the expenses of carrying on the work of his division out of his own pocket, and contributed largely to the general expenses of the League in addition. He was always good natured, cheerful, earnest and enthusiastic in his work. He was always looking for violators of the game laws, following them up, punishing perpetrators in his own way or bringing them to the bar of justice to be punished.

He has reported many cases of law breaking, that he could not reach himself, to State officers; has followed them up and has thus been instrumental in bringing the offenders to justice.

He was a member of the New York Zoological Society, a member of the Camp Fire Club and of the 7th Regiment Veteran Association; and he was always in his place and doing more than his share of work in all these organizations.

Mr. Pond leaves a widow and son to whom the sympathy of all good sportsmen is extended. In Mr. Pond's death I have lost one of the best friends I ever had or ever expect to have. May his soul rest in peace.

MR. HARTLEY DROPS DEAD.

Marcellus Hartley, head of the old house of Hartley & Graham, for many years at 315 Broadway, New York, dropped dead in the office of the American Surety company, January 8. He had been apparently in the best of health when stricken suddenly by heart failure.

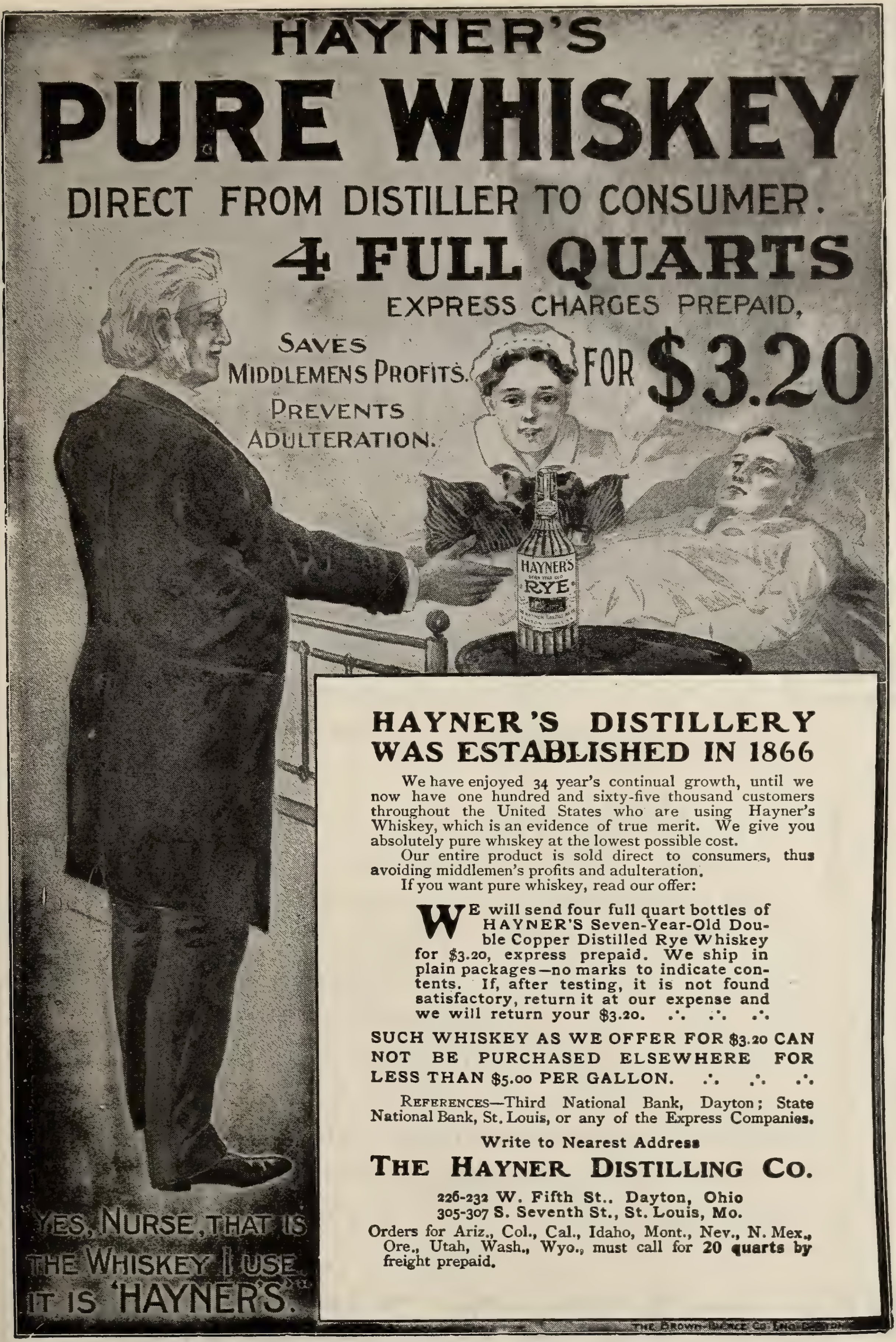
While greeting a friend whom he had met there, his head dropped forward and he collapsed. He was carried to a lounge and died within a few seconds. He was born in this city September 23, 1828, and his first employment was in the office of an importer of firearms. He formed a co-partnership in 1854 with J. R. Schuyler and Malcolm Graham, opening a place of business in Maiden Lane. The firm became Hartley & Graham in 1876. About 2 years ago there was another change, and the M. Hartley Company was formed. Mr. Hartley was president of the Bridgeport Gun Implement Company, of the Remington Arms Company, and of the Union Metallic Cartridge Company. He was also interested in several banks and other strong corporations.

His death marks an epoch in the sporting goods trade of this country and his counsels will be sorely missed by his former associates.

The New York Zoological Society wants a Canadian lynx and a cougar, or mountain lion. Any reader of RECREATION knowing where a good, live, healthy specimen of either of these animals can be bought, will do the society a valuable service, by addressing Mr. W. T. Hornaday, 183d St., and Southern Boulevard, New York City.

Have you the best possible outfit ready for your spring and summer photographic work? Such an outfit is expensive. Why not reduce this expense by earning some supplies as premiums? For instance, if you wish to save your photo prints, send me 2 yearly subscriptions to RECREATION, at $1 each, and I will send you a Buechner album that will hold 100 4 x 5 prints. It will be of great value to you in showing the progress you make in your photography, from the first page to the last, and your prints will always recall interesting memories.

If you wish to make several of your friends happy give each of them a year's subscription to RECREATION. At least once every month they will think kindly of you.



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WE will send four full quart bottles of HAYNER'S Seven-Year-Old Double Copper Distilled Rye Whiskey for $3.20, express prepaid. We ship in plain packages—no marks to indicate contents. If, after testing, it is not found satisfactory, return it at our expense and we will return your $3.20. .·. .·. .·.

SUCH WHISKEY AS WE OFFER FOR $3.20 CAN NOT BE PURCHASED ELSEWHERE FOR LESS THAN $5.00 PER GALLON. .·. .·. .·.

References—Third National Bank, Dayton; State National Bank, St. Louis, or any of the Express Companies.

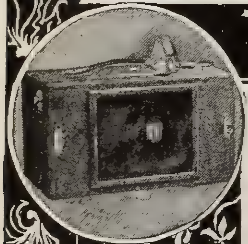
Write to Nearest Address

THE HAYNER DISTILLING CO.

226-232 W. Fifth St., Dayton, Ohio
305-307 S. Seventh St., St. Louis, Mo.

Orders for Ariz., Col., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., Wyo., must call for **20 quarts** by freight prepaid.

I guarantee the above firm to do as it agrees.—Editor.



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Multiscope & Film Co., No. 136 JEFFERSON STREET
BURLINGTON, WIS.

AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

7th ANNUAL COMPETITION.

Recreation has conducted 6 amateur photographic competitions, all of which have been eminently successful. The 7th will open April 1st, 1902, and close November 30th, 1902.

Following is a list of prizes to be awarded:

First prize: A Long Focus Korona Camera, 5 x 7, made by the Gundlach Optical Co., Rochester, N. Y., fitted with a Turner-Reich Anastigmat Lens, and listed at $85.

Second prize: A No. 3 Folding Pocket Kodak, made by the Eastman Kodak Co., Rochester, N. Y., fitted with a Bausch & Lomb Lens, Plastigmat Unicum Shutter, and listed at $61.50.

Third prize: An Al-Vista-Panoramic Camera, made by the Multiscope and Film Co., Burlington, Wis., and listed at $40.

Fourth prize: A Wizard C Camera, 4 x 5, made by the Manhattan Optical Co., Cresskill, N. J., with B. & L. Iris Diaphragm and Leather Carrying Case; listed at $33.

Fifth prize: A Waterproof Wall Tent, 12 x 16, made by D. T. Abercrombie & Co., New York, and listed at $32.

Sixth prize: A Gold Hunting Case Watch; listed at $50.

Seventh prize: A Tourist Hawkeye Camera, 4 x 5, and made by the Blair Camera Co., Rochester, N. Y., and listed at $15.

Eighth prize: A Bristol Steel Fishing Rod, made by the Horton Mfg. Co., Bristol, Conn., and listed at $6.

The 10 next best pictures will each be awarded on dozen 8 x 10 Carbutt Plates, made by the Carbutt Dry Plate Co., Wayne Junction, Philadelphia, Pa.

The 10 next best pictures will each be awarded one dozen 5 x 7 Carbutt Plates.

The 10 next best pictures will each be awarded one dozen 4 x 5 Carbutt Plates.

A special prize: A Goez Binocular Field Glass, listed at $74.25, will be given for the best picture of a live wild animal.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or other animals, representing in a truthful manner shooting, fishing, amateur photography, bicycling, sailing or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of Recreation. Negatives not to be sent unless called for.

In submitting pictures, please write simply your full name and address on the back of each, and number such prints as you may send, 1, 2, 3, etc. Then in a letter addressed Photographic Editor, Recreation, say, for instance:

No. 1 is entitled —— ——.
Made with a —— —— camera.
—— —— lens.
On a —— —— plate.
Printed on —— —— paper.
Length of exposure, —— ——.

Then add any further information you may deem of interest to the judges, or to other amateur photographers. Same as to Nos. 2, 3, etc.

This is necessary in order to save postage. In all cases where more than the name and address of the sender and serial number of picture are written on the back of prints I am required to pay letter postage here. I have paid as high as $2.50 on a single package of a dozen pictures, in addition to that prepaid by the sender, on account of too much writing on the prints.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

CONCERNING DISTANT FIELDS.

Edward W. Newcomb, in the Photo Record.

It is properly held by all advocates of photography that the pursuit of subjects for our cameras takes us out into the country, fills our lungs with pure air, and thus provides health and pleasure combined. This can not be denied, nor have I any wish to dispute the fact; but to those who really desire to produce lasting pictures let me say there are certain subjects at home which, while completely overlooked, are much choicer than are the extended views to be had in the next 5 States. It is strange we with cameras all seem so infatuated with landscapes that, out of a collection of several hundred photographs, there will be a vast preponderance of landscape, some with figures, more without, and few, if any, of the real pictures that one can not help seeing on every side right in our own homes and in our own streets. As a record of where one spent a pleasant summer, these views are not to be despised, though all will admit that their interest is usually personal. These pictures rarely exhibit great artistic excellence, and, even if they do, the credit does not belong to the photographer, for he merely placed his camera in front of these existing gems and obtained a copy of what he found there, what others had duplicates of, and others to come would produce. There is nothing meritorious about such work, since it is in no sense original. I admit, the taking of records to recall a pleasant summer has its excuse, since the practice affords pleasure. But what of the man who, in attempting to win a prize or merely to produce something extra fine, shoulders his photographic outfit and takes long trips away from home to secure some quiet bit of landscape? Is he not, after all, wasting precious time, when right at his door there exists material for a more pleasing picture? After a long ride and some walking, he finds a field of grain that he fancies, an old farm house, a rustic bridge over a brook, a scene down a lane, and maybe a haystack or 2. Then the light fails and he goes home to develop those things. When they are printed he perhaps finds them so technically good that he enters them in a competition or sends them to an exhibition, and later he wonders why he got no prize or mention, when some prints that were vastly inferior to his in photographic technique won distinction. The fact is that a landscape is not so attractive as a story-telling picture, or one which appeals to the imagination. We generally see all there is in a landscape at one glance, and want nothing more to do with it. It is small credit to the photographer, even if well done, and to command much attention it must be wonderfully well done. A whole album full of such pictures is of little interest to anybody, save perhaps the man who took them. Take a look at some other fellow's album of landscapes and you will see the application. Send 20 or 30 of the best landscapes you possess to some competition and see how many you will get back unrecognized; then send that many of something with story telling significance and see how few come back.

Suppose the man who went out into the country had stayed at home. As he opened his door he overlooked the fact that a swarthy son of Italy was there grinding an organ and that several little children were dancing gracefully, making in all a most effective grouping and telling a story. For a dime the Italian would have put down his organ and sat beside it on a step, resting, lighting his pipe or counting his gain; and a most excellent model indeed he would have made, as nearly all his countrymen do. Before our friend left the house he might have taken one of his sisters as she came to meet the postman with a letter she evidently expected, and a little later he could have found her standing beside the window intent on reading it. Though he did not think enough of these opportunities to catch a story-telling picture of a remarkably pretty girl, almost any other man would have admired both poses and would have been interested in the pictures. In front of the stable the coachman was examining the teeth of a bull terrier he had just acquired, and as he eyed his purchase critically he could have been snapped to excellent advantage. A dark hued Southern mammy sat on the back porch paring potatoes, and many of her unconscious poses were excellent. Then our friend might have gone to the front again and been just in time to get a snap of a pretty girl descending from her carriage to call on his sister, and standing with one foot on the carriage step giving her driver instructions. After that he could have got a good picture, after the J. G. Brown style, of 2 street gamins fighting, surrounded by a dozen others who were highly excited and interested. Shortly afterward he could have snapped a game of craps they indulged in; and, being through with that, he could have done effective work with any of the crowd as a model.

This is a small part of what he could have done and secured pictures that would command attention. Charity and photography are alike in one respect: it is well to begin them at home. If one feels that he must have a chance at somebody's $500 photographic picture competition, he must not think that if he could only get the mountains of Colorado, the big trees of the Yosemite, the shores of the ocean or a sublime view from an elevation he would win. No, indeed; far-away fields look green because they are far away, not because they are better or as good as what we often scorn right at our door. If a good picture of the Garden of Eden were hung in one of the best competitions or exhibitions it wouldn't have a chance against a fair illustration of an old song the first lines of which are:

"The prettiest gal I ever saw
Was sucking cider through a straw,"

because the large majority of people like story-telling pictures, and don't like pure landscape.

Have something doing in all the photographs taken, and don't forget that the nearer home this work is done the greater the advantage, for there the artist and his camera will be no new new thing and few poses will be strained or unnatural.

Anyone who perceives the idea and uses his plates or films on *genre* work instead of on conventional landscape will soon find where the advantage is, and he will also have the gratification of hearing himself spoken of as one who is artistic and successful. Remember that the same plate that will take a bit of commonplace woods or a mountain will also take as stirring and admirable picture as the old "Spirit of '76." By your deeds shall you be known.

RECREATION CIRCULATING ALBUM.

It has occurred to me that a circulating album would be a good feature for the camera department of Recreation, *i.e.*, to have subscribers send in one print each, of a uniform size, with full particulars regarding it, print to be of same class as those entered in your competitions or otherwise, not to have been published or entered in any contest, and to give full particulars as to camera, lens, stop, plate, exposure, paper, etc. When all prints are in, say 100, mount in substantial, light weight album. Album then to be started on rounds from one member to another, each to pay the postage to the next, which would not be over 10 cents on a 100 page 4x5 album, and to keep the album not over 2 nights. The route sheet should be written up by adjoining States. This would not take so long as if the "first come, first served" plan should be followed.

If satisfactory to you I would be willing to conduct this album; *i.e.*, the prints could be sent to me. I would write up a key to be mailed separately, also a route sheet, and would attend to any necessary correspondence. For doing this I should expect to keep the album after it had gone the rounds. Of course it would be somewhat soiled and worn. If you would prefer to attend to the album at your office I should be glad to contribute a print, and you could put me last on the route sheet.

H. R. Pfaff, Jennings, Ala.

ANSWER.

We will consider Mr. Pfaff's proposition as having been settled upon, with this condition: that each person contributing to the album shall send 2 prints, in order that a duplicate album may be made, for use in case the original shall be lost.

All readers of Recreation who are amateur photographers are requested to send Mr. Pfaff 2 prints from one of the best negatives.

Recreation will furnish the album, and as soon as the route is made up for a single State, it will be printed in the photo department of Recreation. Any suggestions which readers of Recreation may see fit to offer will be gladly accepted, and if found of interest will be printed in this department.—Editor.

TO COLOR PRINTS RED.

How can I get purple or reddish tones on Solio paper?

Lauritz Smith, Moscow, Idaho.

ANSWER.

To get purple tones on Solio, wash the prints thoroughly before toning, then tone in a bath made by adding to one grain of gold in solution, enough borax to make it a trifle alkaline. To this add 8 ounces of water. When toned, throw the prints in water having a teaspoonful of salt to the pint, rinse and fix. Reddish tones will appear first, then purple. For reddish browns add 10 grains acetate of soda. If you want an out and out red, following is the latest German formula for a red that will set your clothes on fire:

Ammonium sulphocyanide	5 grains
Iodide of potassium	½ to 1½ grains
Chloride of gold solution (1:100)	25 cubic centimeters
Water	1 liter

The pictures should be a little overprinted, and washed a few minutes in 2 or 3 changes of water before toning. If the small quantity of iodide of potassium, as given in the formula, is used, the time of toning will take one to 2 hours; but with the maximum quantity not more than 20 minutes. The toning is carried until the deeper parts of the picture show a carmine red color. The reversed side of the print becomes gray blue in this bath, but this disappears entirely in the fixing bath. The fixing bath is applied in the normal way. The carmine red tone remains unchanged in the fixing bath. The print increases in strength during drying. Pictures which become too strong, can be reduced again by application of a weak bath of iodide and cyanide of potassium solution. The toning bath with iodide of potassium acts best in a fresh condition. It should be used only once.

TO DEVELOP FILMS.

What is the best developer for snap shots that are slightly under exposed? Is pyro more liable to stain films than plates? Can films that are several months old be intensified? What would you recommend as an intensifying agent?

J. H. Wood, Stonyford, N. Y.

ANSWER.

A weak pyro or ortol developer is best for under exposed snap shots. Make it up to normal strength, then add 2 ounces more of water to each 4 ounces of developer. This requires patience, but it gives far the best results. Many think that since the plate had a short exposure the strongest kind of developer should be used so as to bring up all detail. This is wrong. Weak developer affords the most detail and the best printing negatives.

Pyro stains films with identically the same avidity that it does plates. I do not notice any more stain on films than on plates. You should not worry about the stain as it often is the salvation of a thin, weak negative. If one has a good, vigorous negative and the pyro stain is left in, it will be too harsh. You should use a dram of saturated solution of tartaric acid in 8 ounces of water and soak the plate, after fixing in it until all stain is removed.

Old films can be intensified. You can get a good intensifier named Agfa, at the photographic stock houses. It is made by a German firm. EDITOR.

SEVERAL ANSWERS.

I have just received a No. 4 Poco camera. It is the proper size for all amateurs although a picture of this size can be taken with a larger camera. I have been using a smaller camera, but am now satisfied that I am making better pictures for less money. I use eikonogin developer. It develops thin negatives. What is the cause? Please tell me what developer to use for making flashlights. What is the necessary charge of flashlight powder to use in a room 12 by 18 feet? Have you formed any camera club yet?

M. E. Armstrong, Le Roy, Minn.

ANSWER.

Eikonogen gives good detail, but not enough density as a rule. I should certainly use ¼ as much hydroquinone with it as the quantity of eikonogen. Even then the pyro developer advised by the maker of your plates is best. Pyro beats everything and if it does stain the fingers a trifle one can avoid it by using rubber finger tips, which are inexpensive and satisfactory.

Twelve feet away from your subject you may use 60 grains of flashlight powder if you stop the lens way down. With a large stop 40 grains are enough. Two Eastman's flash sheets will serve, also, and these are cleanly and efficient. EDITOR.

MOUNT PRINTS DRY.

Make a thin solution of pure white glue and brush it over the card in the place where the print is to go. Lay the print on the card and rub down with your thumb, dry, starting at the centre and working out. When near the edge lay an old negative on the print and then lay a weight on to hold it down until you get another print ready. In this way a large number may be mounted in a short time. Do not put on too much glue or the face of the print will get sticky. There will be no curling of prints on the edges, and the cards do not warp as if mounted wet.

To polish glossy prints take some old negatives and clean off the backs as much as possible. Rub the negative with a piece of wax candle sufficiently to cover the plate, or to cover any dirt that may not come off. Rub well with a piece of cloth, then lay the wet print face down on the glass, rub down tight, press out all surplus water and air, and let it dry thoroughly. Prints dried in this manner have a beautiful polish and will not stick to the glass. The prints, while on the glass, may be brushed over on the back with a thin solution of white glue and then mounted directly on the card, first moistening the card so it will stick.—A. McLEAN in The Camera and Dark Room.

PYRO DEVELOPER.

In November RECREATION an item reprinted from The Professional and Amateur Photographer gave the following formula for pyro developer:

Water	64	ounces
Carbonate potash..............	2½	ounces
Sulphite of soda crystals (hydrometer test 40)...........	10	ounces

This solution to be used with 16 grains of dry pyro.

In making up this my druggist says the whole solution, water, potash and sulphite of soda crystals, should test 40 by hydrometer. I thought it meant that the sulphite of soda crystals, 10 ounces, fluid, should test 40 by hydrometer. The latter construction requires much less of the sulphite of soda crystals than 10 ounces by weight. Which is right? I like the articles on photography and enclose $1 for renewal of the subscription of Geo. B. Hopson, my son.

C. R. Hopson, Elgin, Ill.

ANSWER.

The druggist is correct. The whole solution should test 40; but still better, the sulphite should test 60 and the carbonate of potash 40. Pyro seems to be greatly in excess for ordinary use if not diluted.—EDITOR.

CHEAP TRAYS.

Your photo department in RECREATION is more and more interesting every month. With the kindness you show us amateurs I do not know why we do not make the department as interesting as the gun cranks make their side of the house. Surely they depend on us for views.

Let me suggest a cheap tray for all purposes. I have been using them some months. Line with white oilcloth a box the size you wish the tray. I am using old plate boxes for rinsing trays. For developer use smaller boxes. Tack the oilcloth all around on the top of the sides and ends. Fit the oilcloth down in the corners nicely before tacking and it will stay all right. Do not tack it down in the bottom nor cut the corners down any, as then it will leak. I got 2 yards of white oilcloth and have made 5 large trays and a number of small ones at a cost of 50 cents for the lot. I need some large trays as some of my prints are 7 by 15 inches.

Do any readers of RECREATION care to exchange views? I can furnish some fine mountain views, mining scenes, etc. I wish to get a collection of views if I can.

C. N. Truman, Ouray, Colo.

FLASHLIGHT POWDER.

Kindly publish in RECREATION a recipe for making flashlight powder.

R. Lindsay MacAdan,
Westmount, Montreal, Can.

ANSWER.

Many journals refuse to give formulæ for flashlight powders on account of the danger incurred in compounding them. If you must make your own try any of the following, but grind each chemical separately and mix on a blotter with a wooden implement. A spark would end your earthly career, or would maim you and probably blind you.

Powdered magnesium, dry, 1 part bulk; powdered permanganate of Potash, 1 part bulk. Use any convenient measure, say a small pill box.

Magnesium powder, 3 parts; antimony sulphide, 1 part; chlorate of potash, 6 parts.

Coat sheets of thin celluloid with dextrine paste and sift pure magnesium on both sides. Pin on a board, when dry, and burn. A 4-inch square burns about 2 seconds. This is much the safest of all.

TONING BATH FOR SOLIO.

I saw in September, 1901, RECREATION, an article in the department of Amateur Photography, by Edward W. Newcomb, as to a toning bath for Solio paper. I use Sun paper, which works the same as Solio, and have tried this bath. I am pleased with the tone, but I have trouble with a yellow stain, which comes on some of the prints. Some of them stain when I put them in, while others stain when the solution is moved a little. I thought it might be the paper, but I tried Solio with the same results. I enclose print to show what I mean by the stain. Will you please tell me, if possible, what causes this stain, and how I can prevent it. I find RECREATION a great help to me.

Alfred S. Griffiths, Amityville, N. Y.

ANSWER.

If you will wash your prints a little longer before toning and keep them submerged in the hypo all the time they are fixing, turning each one over and over, your difficulties will vanish. EDITOR.

URANIUM TONING.

In December RECREATION in your amateur photo department "Uranium Toning of Bromide Prints" is not clear Possibly some lines have been omitted as no mention in the formula is made of uranium nitrate, which presumably is the active toning agent used. I am always greatly interested in this department and have clippings from RECREATION for some years back, arranged in the form of an indexed reference book. I should like to try this uranium process. Will you not correct the article mentioned?

Edwin O. Torbohm, New York City.

ANSWER.

The only difficulty with the formula given is due to a misprint. For nitrate of ammonia read nitrate of uranium. The formula will then work. I can supply you with formulae for toning bromides or Velox prints to a number of colors.

EDITOR.

NEGATIVE VARNISH.

Please give me formula for negative varnish, and oblige Mrs. E. E. Lawrence,
Token Creek, Wis.

ANSWER.

Following are 3 good formulæ:

Place in a flask 95 per cent. alcohol, 1 quart; white stick lac, 3 ounces; picked sandarac, 3 drams. Place flask in warm water and leave till solids dissolve. Filter through absorbent cotton and bottle for use.

1 ounce bleached shellac; benzoin gum, 3 drams; juniper gum, 1 dram; soda borax, 1 dram. Powder and dry them, dissolve in 95 per cent. alcohol to proper consistency and filter.

The foregoing both require that the plate be slightly warmed before applying.

A formula which can be used on a cold plate is: Alcohol, 95 per cent, 1 ounce; gum thus, 10 grains; gum sandarac, 15 grains. Dissolve and filter through sponge.

SNAP SHOTS.

Should like to hear of the experience of others with E. W. Newcomb's spotting medium. I got a box of it, but it seemed full of grit and left small black specks on the print. It was dry and hard, and I moistened it with glycerine, but that did not help it much. I use India ink for my spotting, but it does not fill the bill as something else ought to.

A. H. Middleswart, Portland, Ohio.

ANSWER.

Newcomb's spotting medium is giving perfect satisfaction to all users who understand it. Mr. Newcomb can supply you with further directions if you fail to understand the method of using the medium, and, furthermore, will give you another box if yours is at all unsatisfactory. Scrape a little loose with a knife, fill the brush full, work it into the brush on a smooth surface, and the brush is then good for 2 weeks' or a month's use without further filling by merely wetting it at the lips.—EDITOR.

The print of willow ptarmigan on nest I consider a striking illustration of the habit of the bird in selecting a nesting place where its color places it in almost perfect security by harmony with its surroundings. I discovered this nest by looking for a loose rock to mark a spot where a pair of snow birds were building. I was on the point of putting my hand on the bird when I saw what it was. I then put up a mark and located nest 3 paces and one foot due South from mark. When I returned with camera I took the 3 paces, looked for some time, and was on the point of stepping over the nest when I saw the bird within a foot of where I was standing. My camera is a Wizard.

Evan Lewis, Idaho Springs, Colo.

See reproduction of this photo on page 178.—EDITOR.

Will you please state the formula for making pictures on cloth. I should like to have also formula for fixing and toning glossy and platino papers. I find RECREATION useful and instructive.

W. F. Dubreuil, Island Pond, Vt.

ANSWER.

For printing on cloth use Martin's solutions which are to be had of E. & H. T. Anthony & Co., 120 5th Ave., New York City. If a blue is wanted, use Newcomb's blue print tubes, to be had of E. W. Newcomb, Bible House, New York City.

Your query as to toning glossy prints is best answered in an article on that subject in a recent number of RECREATION.

EDITOR.

Is it hard to enlarge with bromide paper? Will you tell me how to work it and what kind to use? I should like to correspond with someone in the Western States who has used a camera and has done his own finishing.

C. A. Wilkins, Claremont, N. H.

ANSWER.

It is not hard to enlarge with bromide paper. You would better buy a 25 cent book on this subject, as it is impossible to give you all necessary details in this department. Send to Tennant & Ward, 287 Fourth avenue, New York City, for a copy of "Photo Miniature," which treats on the subject.—EDITOR.

I have seen troubles like those of H. L. P., of Bath, Me., caused by neglecting to rinse the developer out of plate before fixing, irrespective of plate or strength of fixing bath. To illustrate, take pyrocatichin and caustic soda and carry plate direct from developer to a new fixing bath, either weak or strong. The bath will fix one or more plates and will then rapidly deteriorate, even refusing to work and thus spoiling the plate. However, if a new bath is made up, other plates developed and thoroughly rinsed, it will be found to fix all right.

C. E. Pearl, M. D., North Bangor, N. Y.

I have been a constant reader of your excellent magazine since September last, and have taken many joyful hunting and other invigorating trips by simply reading the stories in it. I noticed in the September number, F. Goodrick's and in December O. H. Hill's statements about forming a great camera club of readers of RECREATION who are interested in photography. This is a wise suggestion. I earnestly hope that all amateurs will pay attention to this and form a club as soon as possible. What do the amateur photographers say?

Louis R. Murray, Ogdensburg, N. Y.

Negatives that have to be preserved any great length of time should be subjected to double fixing. It is not sufficient to trust to a single fixing bath, and there is nothing gained by making it of more than ordinary strength. By removing the plate to a fresh bath of same strength, after all trace of chloride of silver has disappeared, and from the film in the first, complete disintegration of the particles of dissolved silver is arrested. Plates so fixed, and well washed, will keep in perfect condition as long as may be desired.—The Camera and Dark Room.

In framing pictures, *passe partout* style or otherwise, the effect is often improved by the use of a suitably tinted cut-out mat. Mount the pictures on any piece of card board, then cut the desired opening in the selected mat paper with a penknife and a glass-cutting shape. This mat can then be attached to the print by a few touches of gum around the edges.—The Camera and Dark Room.

To mark trays in photographic work I have used the simple method of filing notches on the edges, and I find that in this way no one could make a mistake.

Geo. M. Ockford, Jr., Ridgewood, N. J.

Are you saving your photo prints? If not, begin at once. Send me 2 yearly subscriptions to RECREATION, at $1 each, and I will send you a Buechner album that will hold 100 4 x 5 prints. It will be of great value to you in showing the progress you make in your photography, from the first page to the last, and your prints will always recall interesting memories.

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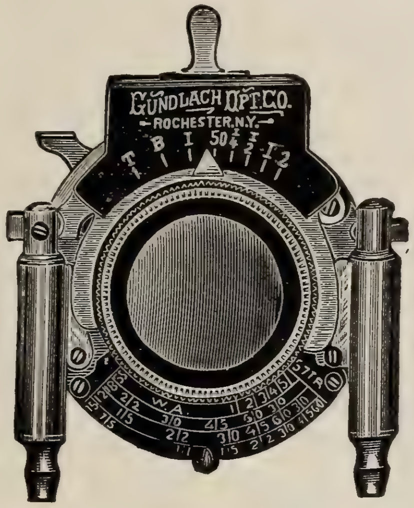

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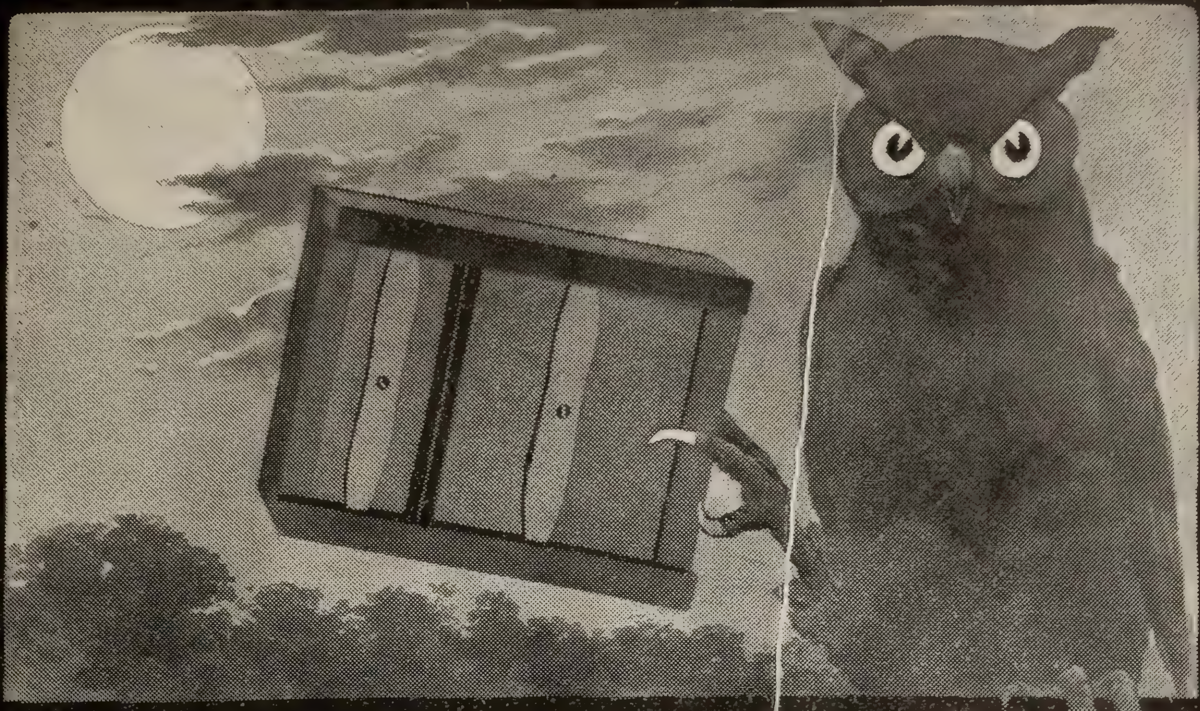

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HINTS FOR BEGINNERS.

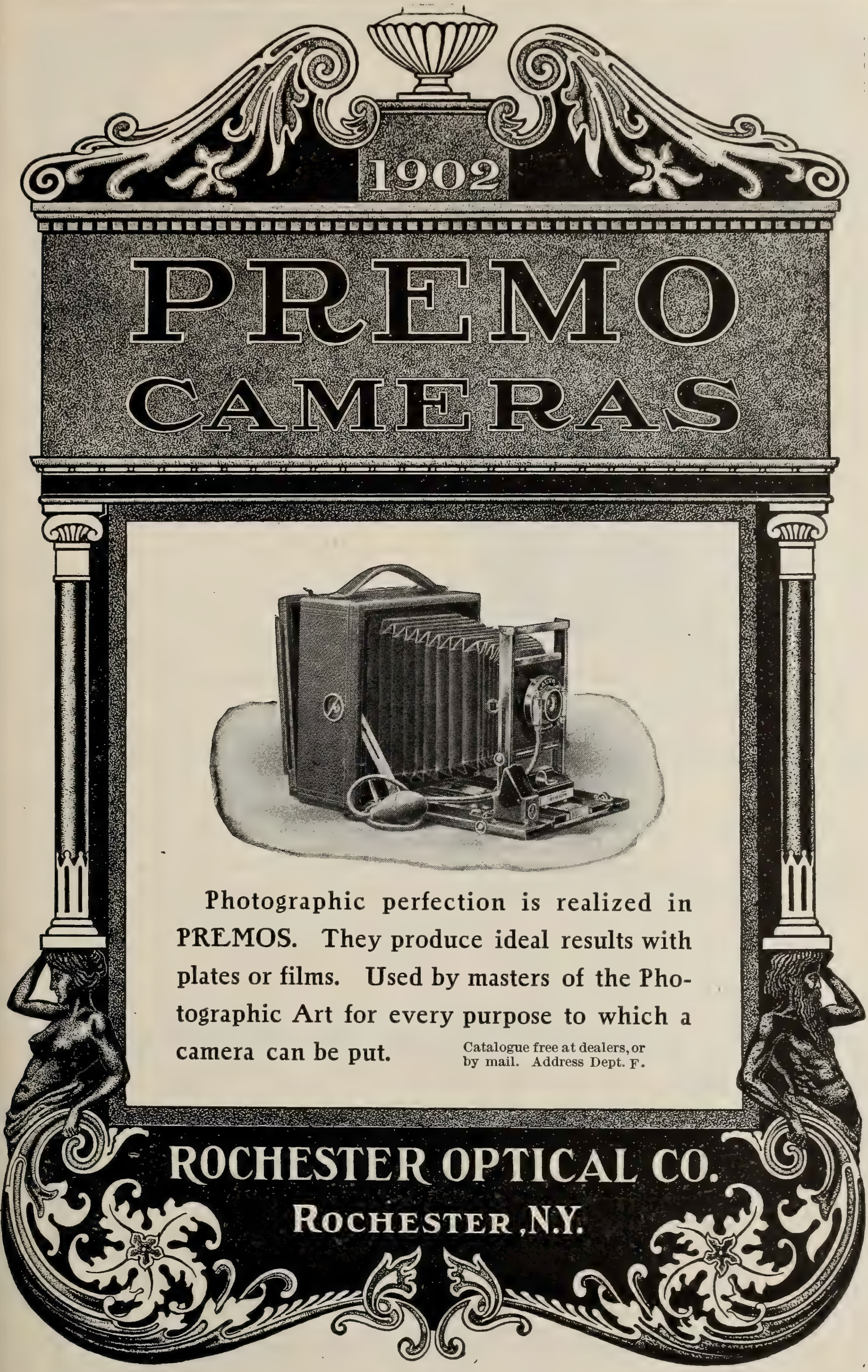
Suppose a beginner has a double lens, a folding adjustable focus camera, say 4x5 size. By following a few hard and fast rules any untrained person can secure results.

First of all, confine yourself to scenery, not to portraiture, which latter, as in painting, is the highest step in the art. Do not make snap shots except when the subject is thoroughly mastered, and then not until that quality is to enter primarily into the merits of the picture.

Place the apparatus on the tripod and focus to the desired scene. Open shutter, enlarge the diaphragm as wide as possible. You will now see on the ground glass a reverted picture of the field before the lens. Move the lens forward or backward as the case may demand to bring image into sharp focus. Then move camera sideways to cut out something undesirable or to bring into the picture what you particularly wish in it, as a large tree, a house or some large object a little to one side to conform with accepted rules for beauty. Then to make doubly sure, adjust focus sharply. Close the shutter and set diaphragm to either f 64 or still better to f 128. Insert the plate holders in proper place. Withdraw slide and set shutter, which should always remain at T (time). One compression of the bulb will open the shutter, the next will close it. Count "and" for opening the shutter and 1, 2, 3 (according to the quantity of light) for closing it. The closing on 1 is for bright, sunny weather not far from noon; on 2 for cloudy weather; and on 3 for hazy weather. The counting should be done as fast as the steps in a fast walk. This will come near to a fair result for a negative in out-door photography. The small stop will bring the foreground into focus, make a good perspective and avoid extreme exposure, the common error of the beginner. After reinsertion of the slide the plate holder may be safely removed. The above rules are for the extra fast plates in the market, such as Lovell's extra fast, etc. Variations of exposure should be based on experience with apparatus. Most failures with beginners are due to over exposure of the highly sensitive and rapid plates of today. A strong wind will cause vibration of the camera and an indistinct image will result. A secure tripod is a necessity. A weight, say a stone on the camera, may stop this vibration, but the beginner would better not work in stormy weather.

The first plates are better entrusted for development to a friend who is accomplished in this branch. If enthusiasm is fed by moderate results, the photographic infant will grow and thrive.—Dr. S. H. Branth, in The Camera and Dark Room.

IN ANSWERING ADS PLEASE MENTION RECREATION.



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Photographic perfection is realized in PREMOS. They produce ideal results with plates or films. Used by masters of the Photographic Art for every purpose to which a camera can be put.

Catalogue free at dealers, or by mail. Address Dept. F.

ROCHESTER OPTICAL CO.
ROCHESTER, N.Y.

TAKEN WITH A REFLEX

Photo by T. W. Ingersoll, St. Paul, Minn.

Every Sportsman
should have a

Reflex Camera

The only Camera adapted for taking sporting and game pictures.

Write for Particulars
Mention Recreation

Reflex Camera Co.
YONKERS, N. Y.

Photographs on Cloth.

If they become soiled or mussed, can be washed in cold water (no soap), and ironed with a clean hot iron. Designs include Official Photos of Pan American Buildings and Niagara Falls. Sent by mail. Sensitized Prepared Cloth, with full directions for printing from your own negatives, sent by mail at $1 a square yard; 50c. ½ yard.; 35c. ⅓ yard.

N. POMEROY, Jr., Lockport, N. Y.

TO EACH PERSON

Sending $1.00 (P. O. Money Ord r) for Subscription to Recreation, I will send, in addition, a Pocket Compass, 1 inch in diameter, polished brass, open face, watch case style, glass-covered dial, ring handle.

EDWARD S. ADAMS,
Box 536. Manchester, N. H.

I will send by registered mail, post paid, 50 5x7 views printed on either Vinco, Solio or Velox paper, and mounted in a Buechner album, for $8. These views are of live and dead game, mountain scenery, lakes, waterfalls, fishing scenes and park views. A sample print will be sent for 15 cents in stamps.

S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—Editor.

"Be sure you're right in it," remarked the Quasi Philosopher, "then go ahead."—Detroit Free Press.

NEWCOMB'S GUARANTEED PHOTOGRAPHIC PREPARATIONS

NON-HALATION PLATE BACKING
50 Cents, Postpaid
Full Directions

With this Backing which is most easily applied and removed, ordinary glass plates are made perfect. It prevents that white fog around light objects, renders perspective truthfully, lends atmosphere and removes all restrictions as to source or intensity of light. With Backed Plates you can take Nature as you find her, truthfully and artistically.

IDEAL SPOTTING MEDIUM
50 Cents, Postpaid

The latest and best article for filling in holes in the negative, so no spot will show on the print. Also for touching up all black and white prints. Two shades of medium to match any tint. Anyone can use it, and improve negatives and prints amazingly. Spot your negatives before printing, or before sending them to be printed, for best results.

PERSULPHATE REDUCER TUBES
50 Cents, Postpaid

Each tube a dose, no waste, no spoiling of what is left. Absolutely necessary for snap shot negatives. Develop for the shadows, reduce *high lights only* in this preparation, the only thing of the kind. Each bath in a rubber corked glass tube.

BLUE PRINT POWDERS
50c. 12 glass tubes

Put up in glass tubes, each tube making solution to coat 3 to 4 sheets 18x22. A luxurious article at a low price for coating paper, note head, postals, cloth, etc. A rich blue and fresh paper always assured. Blue prints are coming in. Better try my tubes. Full directions.

FREE. MY BOOKLET.—"Halation, What It Is and How to Prevent It; also Hints on Spotting Negatives and Prints, Developing, Reducing, Intensifying. With Illustrations," sent free. *Be sure to postal me for this booklet.*—EDWARD W. NEWCOMB, 135 Bible House, New York, N. Y.

Sole Chicago Agent: Almer Coe, 74 State St. Dewey Bros., Los Angeles, Cal., Agts. for Pacific Coast

BAUSCH & LOMB
Plastigmat f-6.8

The Perfect Photo Lens, the latest lens invention, the most perfectly adapted to all modern requirements, composed of 8 lenses giving perfect optical correction, great speed and superior pictorial results. Either system can be used separately for long distance or portrait work. It is small, compact and will take any shutter, fit any camera. It is perfectly under control giving anything from the sharpest definition to the broadest effect. Reproduction of 5 difficult pictures free.

Bausch & Lomb Optical Co., Rochester, N. Y.
NEW YORK. CHICAGO.

Eunice had been doing some figuring on her slate.

"Papa," she said, "do you know this country eats about 2,600,000 tons of sugar every year?"

"No, I don't know it," replied papa, taught by past experience to be cautious.

"Well, it's so. I saw it in a paper."

"Yes? What of it, dear?"

"Nothing, only I've been finding out how much every man, woman and child in the United States eats on an average."

"Well, how much is it?"

"It's about 66 pounds a year. I don't believe I eat half of that, and yet you make a fuss every time I want——"

"That'll do, child. Here's a quarter. Go and get your box of candy."—Chicago Tribune.

Hunters and Travelers Should Use
BUENA Self-Developing PLATINUM PAPER

No chemicals. No trouble. Nothing but water needed to obtain good pictures. Our "PURO" Gelatin paper (insoluble) is uniform, reliable and easy to manipulate. Will tone well in any good gold bath. **Perfect Results with both these Papers Guaranteed.**

Sample Orders filled as follows:
Buena Self-Developing Paper, 1 doz. 4 x 5, 45c
Puro P. O. paper, 2 dozen 4 x 5, ... 25c
" " " 2 " Cabinets, . . 30c

M. H. Kuhn Co., 12 Commercial St., Rochester, N.Y.

SIX 5 x 7 PHOTOS FREE OF CHARGE.

George E. Moulthrope, Photographer, Bristol, Conn., will send every person remitting him $1.00 by P. O. order for a year's subscription to RECREATION, and 10c. for postage, **6 Elegant 5 x 7 Photos on 8 x 10 Mounts.** The photos are from the choicest of several hundred negtives: "Strings of Game Hanging," three of each kind; 'In the Field Series," from life; "Mounted Specimens," artistically posed true to life. Reference as to quality of photos, **Mr. G. O. Shields.**

A New Lens

Many **Photographic objectives** are offered under the guise of **Anastigmats,** yet only a very few are actually equal to their maker's claims. The name **Anastigmat** is a **Misnomer** as applied to any but a **perfect lens.** Anastigmatic has only one meaning,—"free from astigmatic aberration." A lens of this ideal type is our

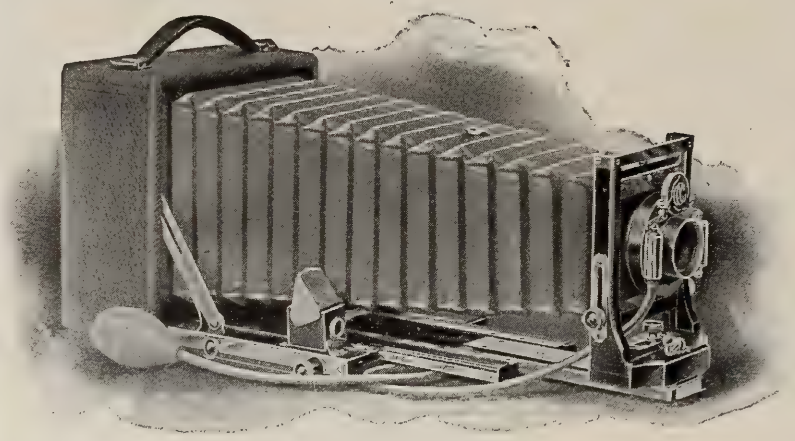
VERASTIGMAT

(TRUE STIGMAT)

The **Speed** (actual,—not nominal) is, F-6.8.
The **Construction** embodies the practical execution by methods of the utmost scientific precision, of the conditions prescribed by the most rigid requirements of the theories of advanced optics.
The **results,**—well, we prefer to have you judge for yourself,—for after all it s results which chiefly interest you. Make a comparative test,—we'll supply a Verastigmat for the purpose.

MANHATTAN OPTICAL CO. of N. Y.
CRESSKILL, N. J.

FINEST CAMERA IN THE WORLD



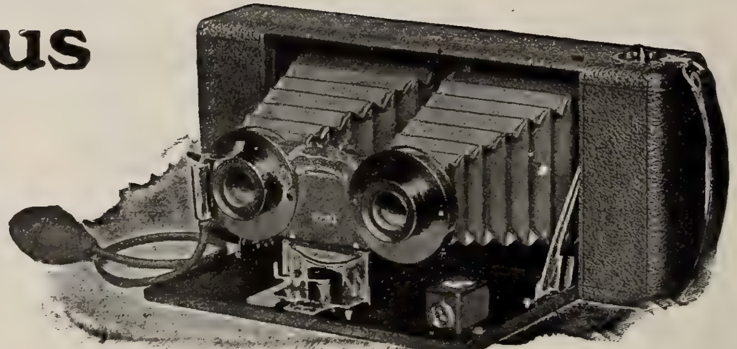
The Century Grand

Not like others, but a thoroughly **distinctive** Camera, owing to its many new and exclusive features. Specially adapted for Sportsmen, having great focal capacity, thus permitting the use of long focus lenses, necessary to secure photographs of wild animals, birds, etc. Every adjustment for both hand and tripod work, including **Swing Bed and Swing Back** operated by rack and pinion, **adjustable front** moved by **pinion, triple** extension bed, new **Convertible** lens of extra quality and **Automatic** shutter. Send to your dealer or write direct for 1902 Century Catalogue, showing complete Century line, ranging in price from **$8.00 to $100.00.**

CENTURY CAMERA CO. 59 Atlantic Avenue
Rochester, N. Y.

Marvelous Effects

The sensation of actually looking at the things themselves.



The STEREO WENO HAWK-EYE

is a complete stereoscopic outfit of the highest type in pocket form. Fitted for regular 3¼ x 4¼ cartridge film, has brilliant finder, automatic iris diaphragm shutter and double rapid rectilinear lenses, accurately matched, guaranteed to produce perfect perspectives.

Price Complete, $25.00.

Hawk-Eye Catalogue free by mail. BLAIR CAMERA CO., Rochester, N. Y.

FROG SHOOTING.

Frog shooting will probably be considered a childish amusement by bear and moose hunters. Nevertheless it is good fun, and by no means so cruel as some higher branches of sport. The smallest rifle ball is instant death to a frog; there are no cripples to get away and suffer. Then, too, the skill required in this shooting is considerable. Try it from a boat when the wind is blowing, and see how many misses you can make. There is no time for deliberate aim; it is a snap shot or nothing. And your target is only a frog's head bobbing in the lily pads or the pickerel grass.

The best time is about 6 o'clock in the evening, when the frogs are singing vespers. In shore the little fellows are chanting "Knee deep, knee deep, O weep." In the lily pads the big fellows cry warningly, "Better go 'round, better go 'round," while other croakers make after dinner remarks: "Lunk-lunk-lunkhead." "You're drunk, you're drunk."

From a gustatory point of view frog legs lay over birds and venison. Dress them nicely, roll in Indian meal, drop in ½ pound of boiling butter and cook to a rich brown. At the same time have a panful of sliced potatoes and onions frying in pork fat. When all is done and you sit down to your camp dinner on the lake shore, you will be glad you are alive. F. H. Carter,

Orange, Mass.

"As Quick as a Cat."
This picture shows the marvelous speed and wonderful definition of
THE COLLINEAR LENS
A true anastigmat of remarkable power and unlimited scope that can be adapted to the smallest Kodak, Weno or Premo, or the largest instrument for studio or field. If you would like to learn "The Lesson of the Lens," send for the free book, "Pictures That Win Prizes." Address,
Dept. E., Voigtlaender & Son Optical Co.
137 W. 23d St., New York City.

It's What You Have Wanted For Years

Something that would convert your *No. 3 Folding Pocket Kodak* into a plate camera without the least interfering with the use of film. This idea has been successfully carried out in the new

Goerz Plate Attachment

Practical, Reasonable

So constructed as to add very little weight or bulk to the outfit.

For Further Information and Circular,
Address Your Dealer, or

C. P. GOERZ OPTICAL WORKS

Room 27, 52 E. Union Square, New York

THE ARMY RIFLE.

The article by E. E. Stokes quoting extracts for the report of Lieut. T. B. Mott, printed in November RECREATION, shows a lack of practical knowledge of the U. S. magazine rifle on the part of both the writer and his authority. I have no means of ascertaining the reasons for the remarkably poor shooting of the troops stationed in the Department of the East, but it was not the fault of the weapon used. Recent records made with the Government magazine rifle and suitable ammunition therefor. prove conclusively that when properly handled it is a weapon of great accuracy.

No doubt if all models of the Krag rifle and carbine were fitted with wind gauge rear sights, a great improvement would be noticed in scores on the target range; but the value of the arm for battle purposes would be materially enhanced; in fact, the reverse, unless the troops using them were especially selected men. In the excitement of battle there is only a small percentage of men who can be depended on to properly adjust their sights. Such men should have telescopic or special sights for fine work; for the others the present service sights are admirably suited.

The Inspector of Small Arms above referred to, before condemning the army rifle, should have offered practical evidence in proof of his assertion that "the poor shooting is undoubtedly due to the use of the small bore." The 30 calibre ammunition issued from Frankfort arsenal in the past may not have been always uniformly reliable, or adapted to fine target work; but, if the soldier knew how to handle his piece, it would shoot into the silhouette target figures at the several ranges with great regularity.

Interest in target practice in the U. S. army has flagged for a number of years. Strenuous endeavor should be made by the War Department to revive the old-time enthusiasm and encourage the soldier to become a good marksman. There was a time, not many years ago, when proficiency in rifle practice was considered one of the first requirements in the training of the soldier; but since the craze for calisthenics, musical rifle drill and acrobatic cavalry performances struck the army, rifle shooting has been relegated to an unimportant place. Of course the annual target practice is still continued, but in a more or less perfunctory manner, and the shooting season is looked forward to as a time of drudgery, which it is well to hurry through. I ask all readers to watch the work of the U. S. magazine rifle in the hands of experts on the various ranges in the States. Careful observation will, I am sure, set aside all doubts as to its accuracy, and at the same time create a feeling of profound respect for the shooting qualities of the national arm. Y. D. Wake, Manila, P. I.

A VOICE FROM ONE CRYING IN THE WILDERNESS.

The great salt meadow of Newark was in time gone by one of the best places in New Jersey for wild fowl shooting. It contains many square miles of marsh land, over which the tide rises, once in the spring and once in the fall. Its surface is cut by winding creeks and indented by rush-bordered ponds. Here and there a rise of ground is shown by the growth of a few trees; or a hollow, by the rank green of the salt hay. Along its borders cattails and calamus entwined with ironweed and jewel-weed make an almost impenetrable mass.

Let an old hunter ramble over those spots he once knew so well. He traverses the winding creeks. No sound breaks the stillness, unless a stray duck jumps far ahead and with rapid flight disappears, or a frightened muskrat, maybe the last survivor, dives deep at the sound of an oar, and hides in his darkest hole. What thoughts come back to the old man? He thinks of a morning long ago, when he sculled his boat down this same creek. From out each nook a flock of ducks took wing, and now and then he was startled by the sudden splash of a muskrat.

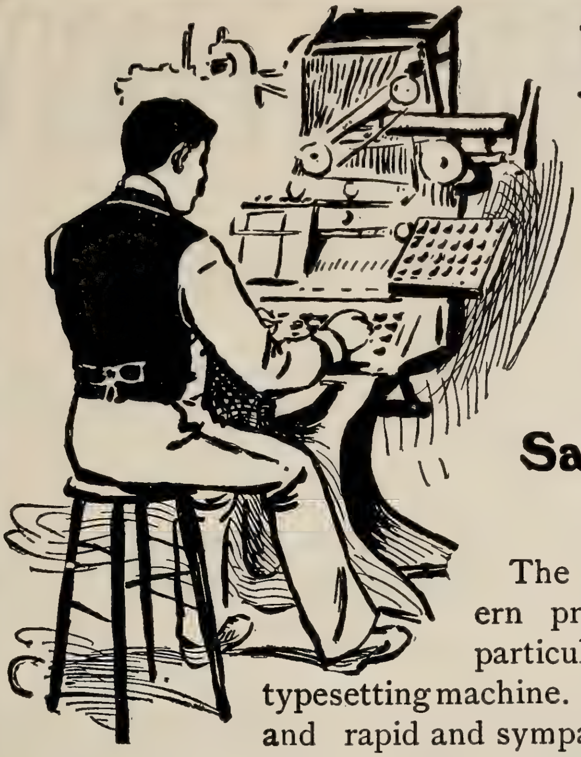
When he reaches the higher, brush-covered ground, what is it he misses? The whir of wings as a bevy of quails spring up; the dismal croak of the heron; the call notes of a rail; the bobbing of white breasts on the flats as the snipe and plover drill the soft mud with their bills: all these are gone from the picture forever. The tangle of rushes and vines is the same as he saw it long ago. But where are the reedbirds that once thronged the place? Where the jacksnipe, with their zig-zag flight and startling "scaip, scaip"? The place no longer teems with birdlife, and the old man longs for the old days.

Why is it that wherever animal life exists it must be sought out and destroyed? And, after all, does the real pleasure derived from hunting lie in the killing of the game? Do you not feel better after a flock of birds rises before you or swings past your blind if you miss them with both barrels? You have had the excitement, and the birds still have their lives. If we must shoot at those flying wedges, then blessed be he who is a bad shot.

Let all who have learned the gospel of game protection, as preached through RECREATION, become missionaries in this great cause of protecting not only game but all animal life. Already we hear the cry, "Too late, too late!" But "It is never too late to mend." C. A. U., Elizabeth, N. J.

The Bishop: Wouldn't you like to be born again, little girl?

The Child: No, ther; I wath born in Bothton the very firth time!—Puck.



Machine Type-Setters.

Said to be Hard on Operators.

The work of a typesetter in a modern printing office is very exacting, particularly if he runs a linotype or typesetting machine. It requires the closest attention and rapid and sympathetic action of both brain and hand. This machine works much like a typewriter. Such workers fed on ordinary food give up because of nervous prostration, some in a short time, and some are able to stand it longer.

One of these workers says: "I have been at the linotype three years. It has made a great change in my once robust health. About three months ago, after long expecting it, I completely collapsed, from indigestion and extreme nervousness. The daily physic I had not dared to omit for years, now and then, refused relief and a physician was consulted.

"'Change of occupation and diet,' read the prescription; 'advise eating Grape-Nuts food twice daily.' I had often set up the advertisements of the Postum Cereal Co., but somehow printers are apt to think advertisements are not intended for them to make use of. I could not well change my occupation, but did change the diet.

"Since then have used Grape-Nuts, both at breakfast and supper, daily. The results are truly remarkable. The first perceptible change was in the matter of digestion. It has been six weeks since I have had to swallow an aperient of any kind. At the beginning of my experiment with Grape-Nuts I weighed 124 pounds; last evening I tipped the beam at 157½.

"My nerves, which were completely shattered three months ago, are now strong and steady, and I do not tire easily, though I go to bed an hour later on an average than formerly, and have increased my capacity at the machine fully two columns of type a day. I am convinced that Grape-Nuts food is the food for persons of sedentary occupation, especially for those who work with brain in lieu of brawn."
Chas. H. Eckhard, 177 N. Chambers St., Galesburg, Ill.

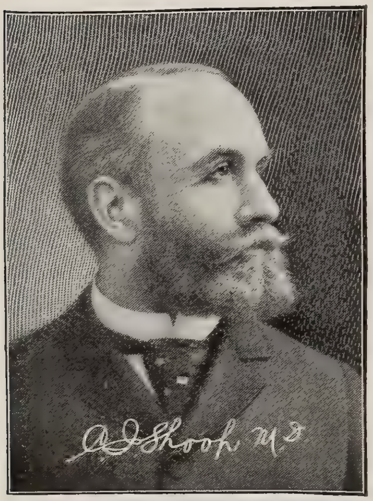
WILL YOU SPEND A PENNY

For a Sick Friend?

Here is my proposition. I have written the six books shown below. I want no money, I simply desire the privilege of sending the book needed to some one who is not well;—I will do more: To prove my faith in my newly found principles of curing the sick, I'll send you an order on your nearest druggist for six bottles of Dr. Shoop's Restorative. I will let you or your friend take it for a month; and if it succeeds, he will charge you $5.50 for it. If it fails, your druggist will send the bill to me. I will tell him to trust to your honesty, leaving the decision to you. You will know then what my Restorative can do. My Restorative will gain your good-will and endorsement under such a trial.

No physician ever has, nor ever will, I believe, make an offer like this—my remedy is the only prescription yet found to stand a test like this.

And I do exactly as here stated. No catch. No deceit. You deal with your own druggist, who may be your neighbor, and a stranger to me. The plan protects you absolutely.



You will see this offer published in every high-class magazine and widely circulated paper in America, and here lies the proof of my success. My records show that 39 out of each 40 who accepted the six bottles, paid for them. They paid because they were cured—there are 39 chances in 40 that I can cure you. Is this not a remarkable offer? Is not the record of cures even more remarkable? I fail sometimes, but not often. A few of these diseases arise from causes like cancer, for which, as yet, no man knows a cure.

And how do I accomplish this? I will tell you. I have found a way to strengthen the inside nerves—the only way yet known. These nerves alone operate each vital organ. The Heart, Stomach, Kidneys, etc., each have their nerve branch. The power that makes each organ do its duty, is the inside nerve power—nothing else. I know how to restore that power. No matter which organ is weak, this nerve system operates them all. Nerve strength or weakness extends to all.

My Restorative goes directly to this cause—these nerves. That is the secret of my success. Don't let prejudice keep you from learning what my books will tell you. They are practical books written for intelligent people. I am not appealing to ignorance, and I wish to discourage prejudice. No matter what your doubts. Remember I have spent a lifetime on my method, and it is unknown to you. I cannot call personally upon seventy-six million of people. Then I must tell you of my offer through the papers you read.

The telephone, the telegraph, the wonders of electricity have been solved by man. May I not have found a way to do as much for human ills?

Thousands who are sick will read this—who are discouraged because of others' failures to cure them. That is no reason why they should not get my book. You cannot know too much about ways to get well, when such ways can be tried at my risk. This offer is too fair to need argument. Won't you spend a penny for a sick friend? Write a postal to-day for the book he needs. Your reward will come in knowing you opened the way to a cure.

Simply state which book you want, and address
Dr. Shoop, Box 214,
Racine, Wis.

Book No. 1 on Dyspepsia.
Book No. 2 on the Heart.
Book No. 3 on the Kidneys.
Book No. 4 for Women.
Book No. 5 for Men. (Sealed.)
Book No. 6 on Rheumatism.

Mild cases not chronic, are often cured by one or two bottles. At all druggists.

PUBLISHER'S NOTES.

PROCTOR'S THEATRES.

When Proctor's Theatre, Newark, was dedicated, January 6, the seventh theatre was added to the Proctor Circuit.

There is excellent quality, as well as abundant quantity in the Proctor entertainments, and they are offered at such popular prices—15, 25 and 50 cents—that the public has taken a strong liking to the new plan of vaudeville and the drama combined, and the theatres on the Proctor Circuit are crowded to their full capacity at all times. Refinement and superior excellence are the key note of the Proctor scheme, and patronage of ladies and children is especially solicited and fostered. Nothing which could in the least offend the most fastidious is ever permitted on any Proctor stage, and the personal conduct of everybody in the Proctor audiences must likewise be above reproach, or speedy ejectment and a permanent ban to admission are the consequence.

The F. F. Proctor Stock Co. will soon take permanent possession of Proctor's Montreal Theatre, present the best comedies, with high class vaudeville numbers interlarded between acts. A like policy prevails at Proctor's Albany Theatre, and the Stock Co. will be the chief factors in the amusement at Proctor's Fifth Avenue, Fifty-Eighth Street, and One Hundred and Twenty-fifth Street Theatres, in New York. The Twenty-third Street Theatre will continue to be devoted exclusively to presentation of continuous performances of the best vaudeville.

NEW HIGH GRADE SYRACUSE.

The Syracuse Arms Company, of Syracuse, N. Y., manufacturers of the Syracuse hammerless gun, will, this year, market their product differently from the manner in which they have been handling it the past few years. Formerly their entire production was handled by one large jobbing house. This year they will quote direct to the dealers and large jobbers throughout the country. They have also decided, and are now ready, to place on the market 4 styles of high grade guns in addition to the line they have heretofore manufactured. The new guns which they are making will be distinct as A, B, C, and D, prices ranging from $75 to $300 each. These guns will be made with the finest Damascus and Whitworth fluid pressed steel barrels. All the guns will be handsomely engraved and checkered according to price. It is the intention of the management to make the Syracuse high grade guns as popular as their cheaper grades.

The company has recently issued a circular showing nearly all the grades manufactured by them, and is now at work on a catalogue, which, when completed, will show their entire line, taking in all the new high grade guns they are putting on the market this year. The company will cheerfully furnish information or designs of their new guns and will also quote direct. In writing them please mention Recreation.

THE SPORTSMEN'S SHOW.

This popular event is now but a few days away, and Manager Dressel and his assistants are working overtime to have everything in readiness for the opening date, Wednesday, March 5.

The show of 1902 will be on lines radically different from those of last year. Instead of a small lake at the eastern end of the Garden, one great wooded island will rise from the center of the amphitheatre, with a mimic trout brook winding its way around the island. On the island, will be the big game enclosures. Along shore will be located the camps and cabins of Maine, Adirondack and Canadian guides. Other features of the show will be live game birds and animals, live fishes of many kinds, exhibits of guns, ammunition, fishing tackle, canoes, launches, sportsmen's clothing, mounted game animals and birds, etc. Don't fail to see the show this year. It will be the best of all.

25-CALIBER BULLETS.

The Ideal Manufacturing Co., New Haven, Ct., announces a new series of 25 caliber bullets and that moulds for same can now be supplied. These bullets will be designated in their next catalogue as No. 257,231.

The shape of the point of the bullet is such as will permit of its being seated in the shells, with the regular tools, for the 25-20 single shot and repeating rifles; also for the 25-21 and 25-25 Stevens. The bullet of 66 grains will be found a good one for short range, and the 88 grains will be correct for full charge, for the above mentioned rifles.

For the 25-35 and 25-36 high pressure quick twist rifles the 3 different weights will be found satisfactory; the 111 grains for 200 yards, the 88 grains for 150 yards, and the 66 grains for 100 yards or less. If you wish further particulars please write for them and mention Recreation.

A MODERN MAGAZINE.

The first number of Geo. H. Daniels's new magazine, entitled "The Four Track News," made its appearance early in January. This time it is a real magazine, sure enough. Mr. Daniels has been issuing, for a year past, a folder under the same name; but the new book is the real thing. It has

35 pages of pure reading matter and pictures of just as good a quality and just as interesting as can be found in any other magazine of the country, except, of course, Recreation. The page size is about the same as that of Recreation. The articles treat of travel, history, business development in many branches, etc. The price of the new magazine is only 50 cents a year, or 5 cents a copy. It is worth double the money.

I beg to again remind you of the most excellent line of dog remedies manufactured by the Polk Miller Drug Co., of Richmond, Va. Mr. Polk Miller, the veteran sportsman and author, and who is president of this company, has had 40 years' practical experience in treating diseases of dogs. The preparations he makes are invaluable to dog owners, inasmuch as they are only intended for the ailments with which dogs are more frequently afflicted. Three cents in stamps will enable you to get a revised edition of Mr. Miller's book on "Dogs—Their Ailments—How to Treat Them," including a pedigree blank for which no charge is made.

The new Goerz plate attachment appeals to many persons interested in photography. The attachment is fitted to the No. 3 folding pocket Kodak only, and allows the owner to use both film and plates, besides permitting him to focus the picture on the ground glass. The cost of the attachment is reasonable, and 6 plate holders are included in the outfit. The advertisement of the Goerz Optical Company in this number illustrates the attachment fitted to the Kodak. Further information will be readily furnished if you will communicate with the manufacturer, C. P. Goerz Optical Works, Room 27, 52 E. Union Square, New York. Mention Recreation.

Every reader of Recreation should read the Page Fence ad in this issue. It is well worth it. It has a good ring to it and shows that even great corporations recognize the work Recreation is doing in its effort to annihilate the game hog. The Page Fence Co. is working for the same cause that Recreation is, namely, the preservation and propagation of big game animals and birds. Though the Company admits it cannot fence out the game hogs, it can fence in the game, and the owners thereof can do the rest.

Readers of Recreation are again offered a chance to buy pure maple sugar and syrup from a fellow sportsman and a fellow reader of this magazine. I refer to Mr T.A. Waterman, of Johnson, Vermont, whose ad appears on page xli of this issue. I have bought some of Mr. Waterman's product and can cheerfully certify to its purity, cleanliness and gilt edged quality in every way. A banker who knows Mr. Waterman intimately tells me he is thoroughly reliable, and that any orders sent him will be promptly and honestly filled.

Hemm & Woodward, Sidney, Ohio, say they are getting large numbers of orders for their Wick Plugs from Recreation readers, but they imagine there must be many other readers who have shotguns and who have not yet learned of the peculiar advantages of the Wick Plug for preventing fine guns from rusting. All such are strongly advised to write Hemm & Woodward for a descriptive circular of their new appliance. When you do this, please mention Recreation.

The Savage Arms Co., Utica, N. Y., has issued a catalogue for 1902. The picture design is by Dan Smith, a well-known illustrator, and represents a mountain tragedy. The picture has all the dash and spirit for which Mr. Smith's work is famous, and would make a welcome addition to the collection of every big game hunter in the country. Send 6 cents for a copy of the catalogue and say you saw it mentioned in Recreation.

Spratts have issued their calendar for 1902, and as usual have devoted the pictorial part of it to dogs, cats, poultry and rabbits. There are some interesting illustrations of these birds and animals, and everyone who likes them should have a copy of this calendar. See cut on page L of this issue. Address Spratt's Patent, Market and Congress Streets, Newark, N. J. Mention Recreation.

Mr. Henry L. Jespersen,
10 Park Place, New York City.

Dear Sir: The fishing rod purchased from you has been given a severe test, and I am satisfied that I received double value for my money. Respectfully yours.
C. S. Enos, Newport, Vt.

David Thomas, a contractor and civil engineer at Wilkesbarre, Pa., who recently completed 2 iron bridges at that place, is a graduate of the International Correspondence Schools, Scranton, Pa.

Citizen—Madam, why do you persist in punching me with your umbrella?

Madam—I want to make you look around so I can thank you for giving me your seat. Now, sir, don't you say women have no manners.—Chicago Record-Herald.

The Horton rod I received as a premium is O. K.
W. Martin, Jennings, Mich.

THE FABLED 7 LEAGUE BOOTS

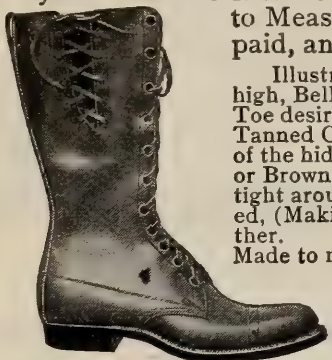
were not more wonderful than are

The Putman Boots

The World's Standard.

Send For Catalogue of over 30 STYLES OF WATER PROOFED BOOTS. Also Indian Tanned Moose-hide Moccasins.

They are Genuine Hand Sewed, Water Proof, Made to Measure, Delivery Charges Prepaid, and Cost no More than others.



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Supports without restraint. Lies FLAT against the leg. No friction. No chafing.

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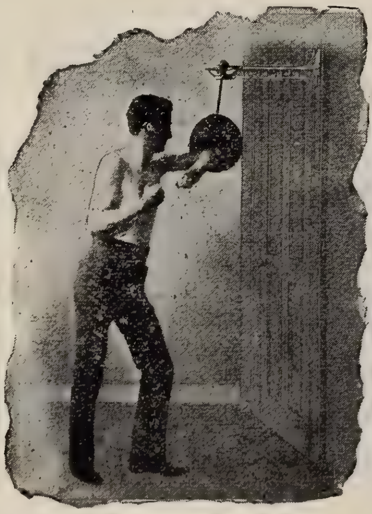

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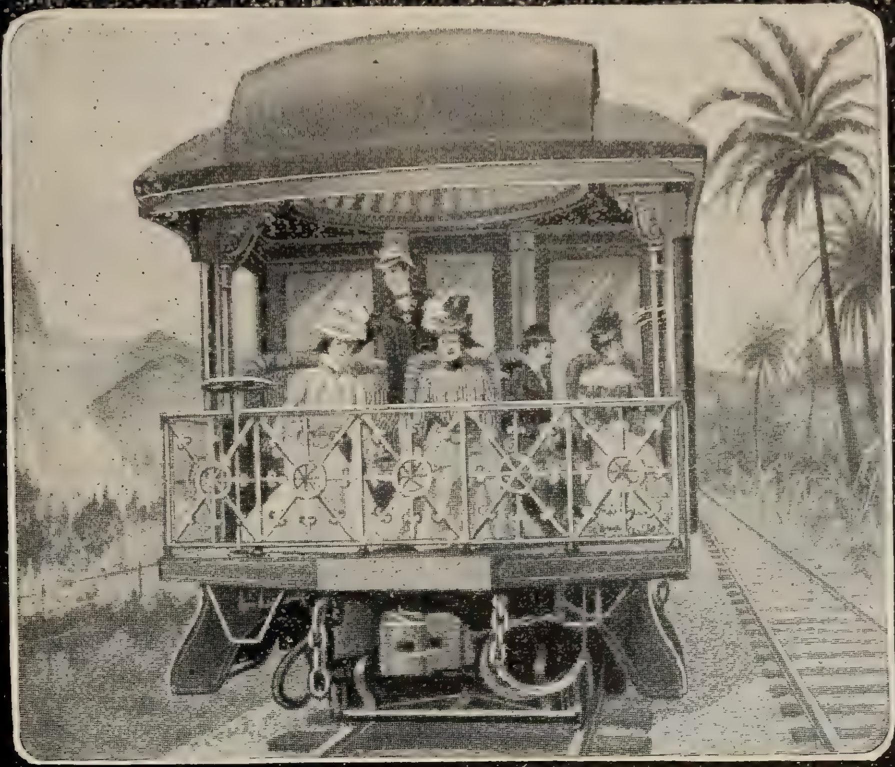

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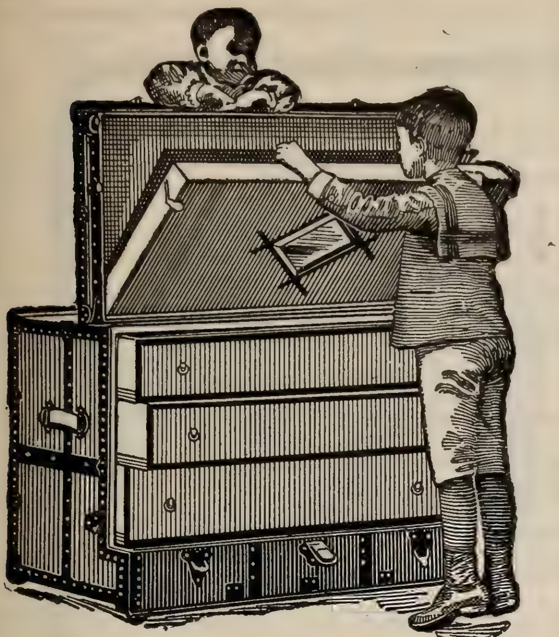

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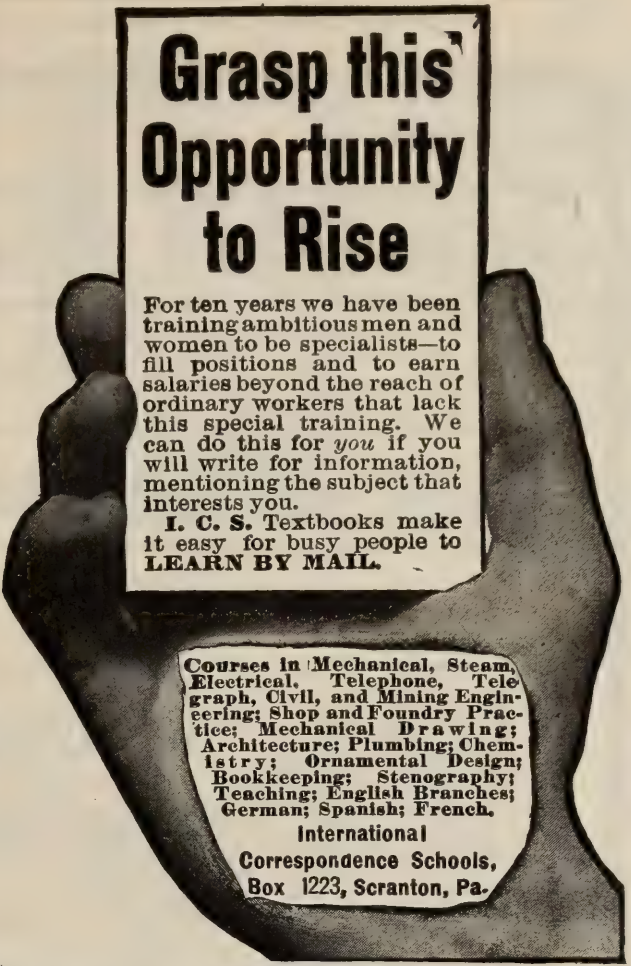

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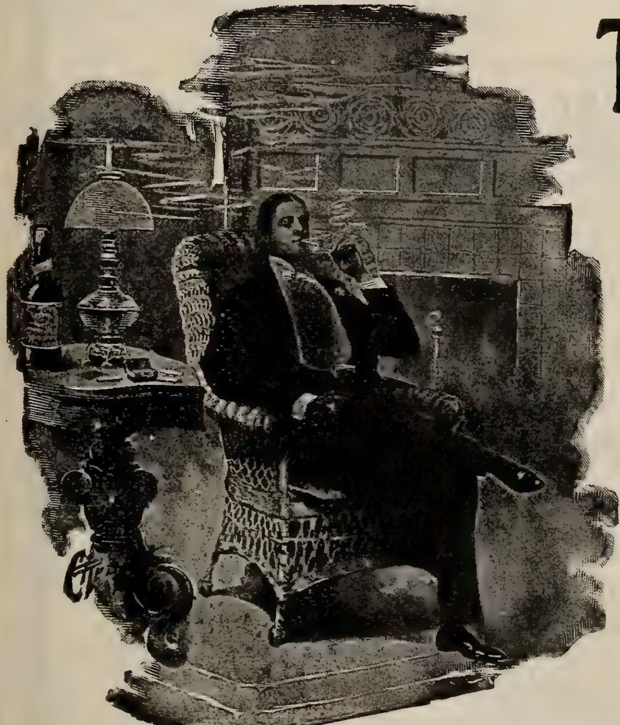

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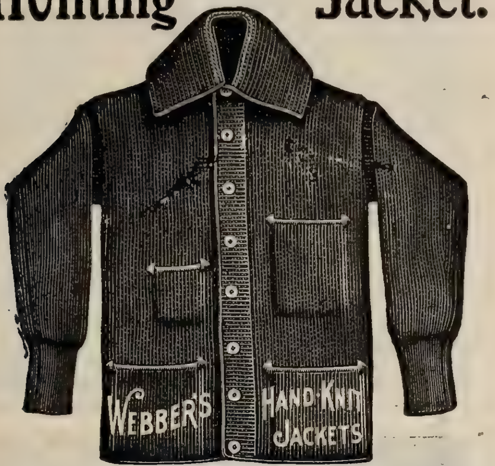

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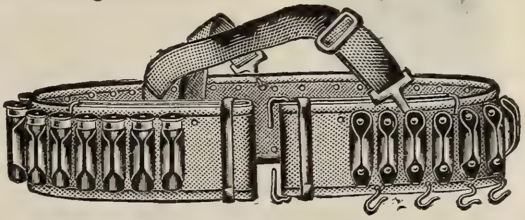

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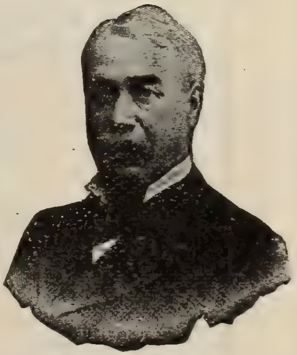

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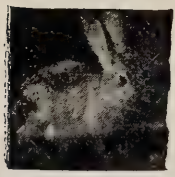

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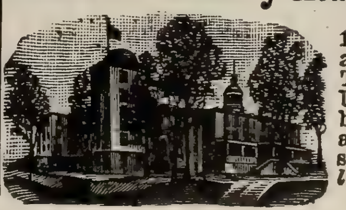

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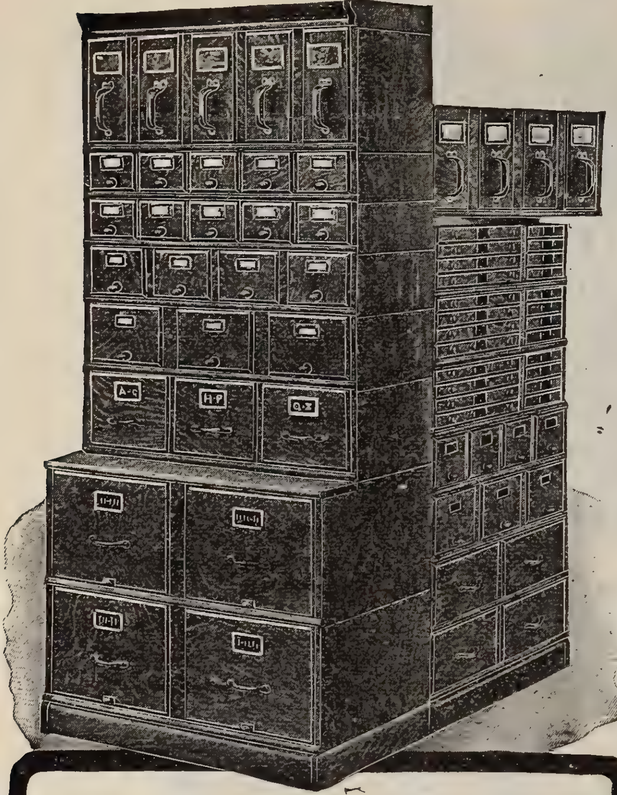

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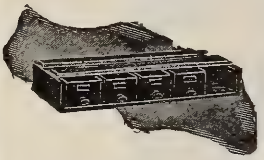

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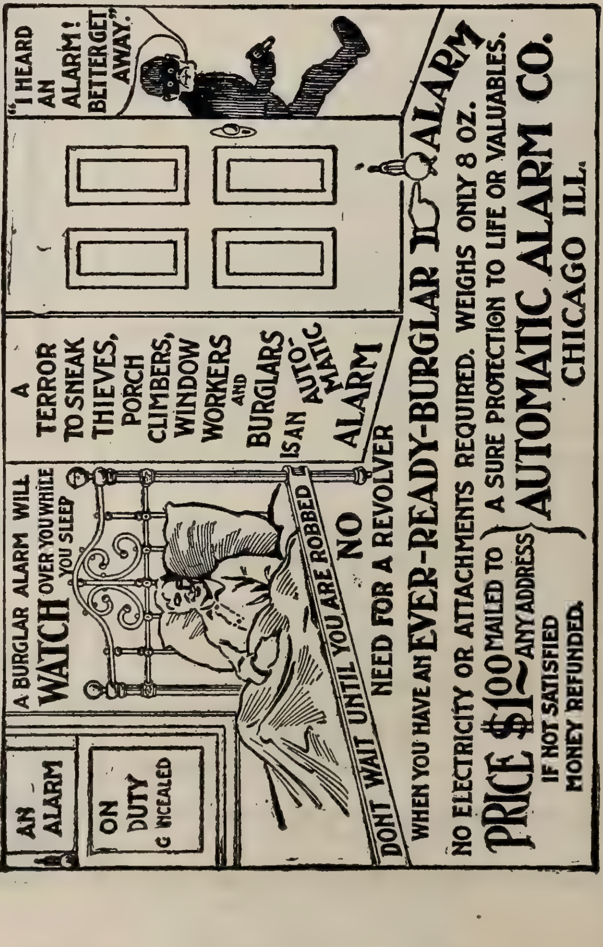
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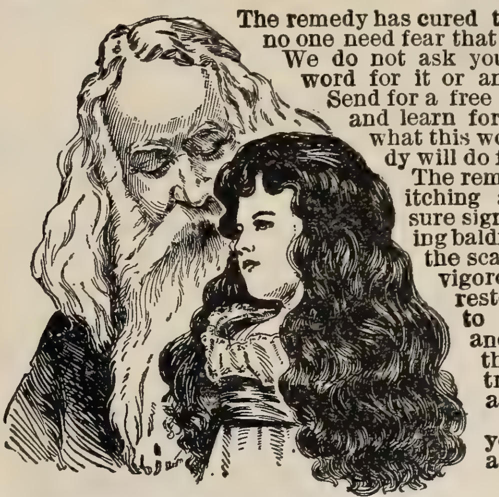

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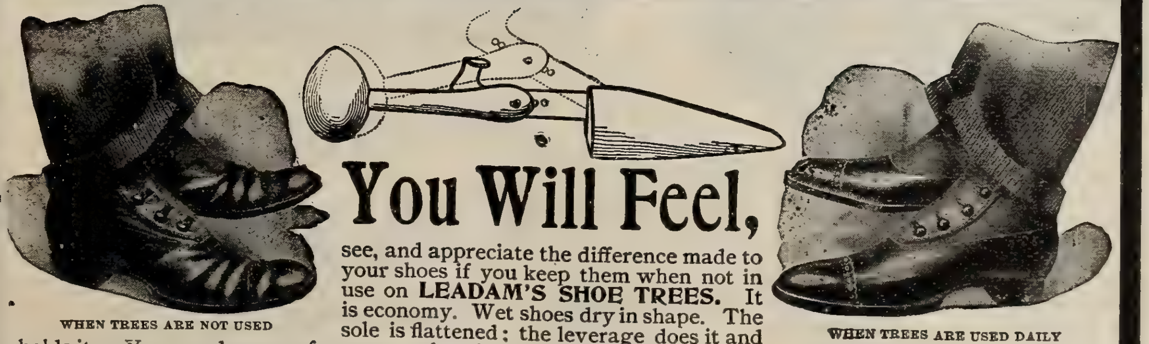

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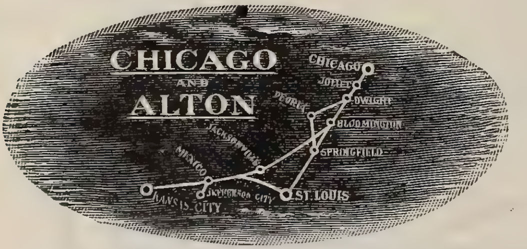

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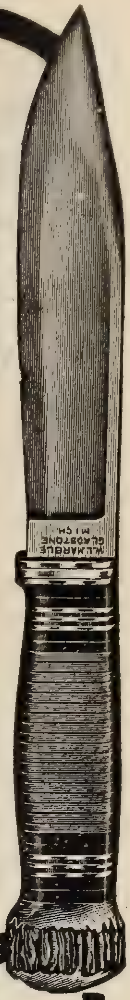

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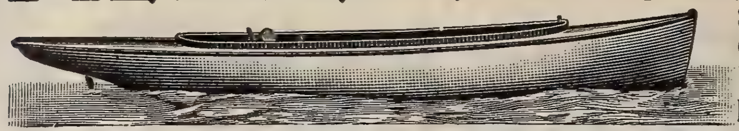

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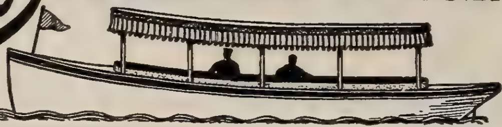

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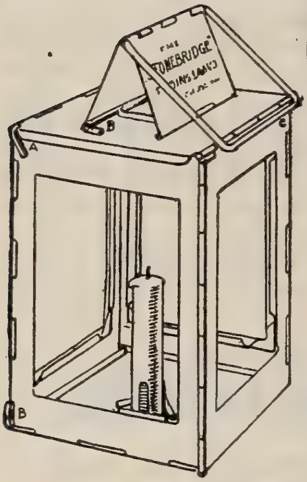

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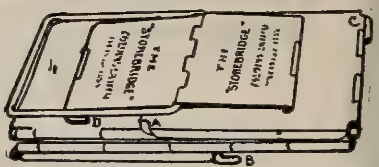

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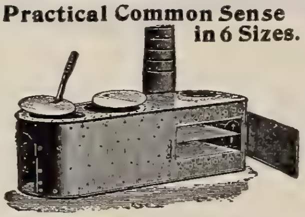

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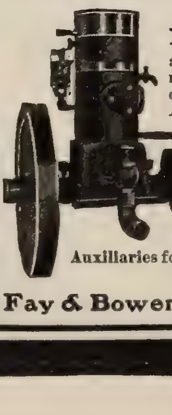

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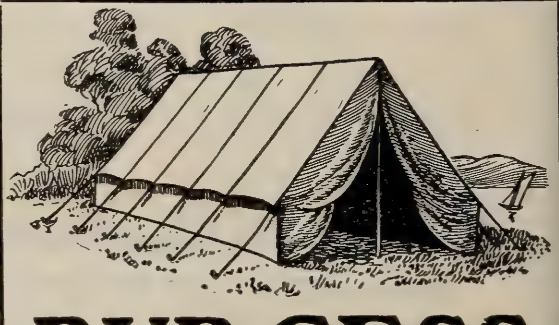

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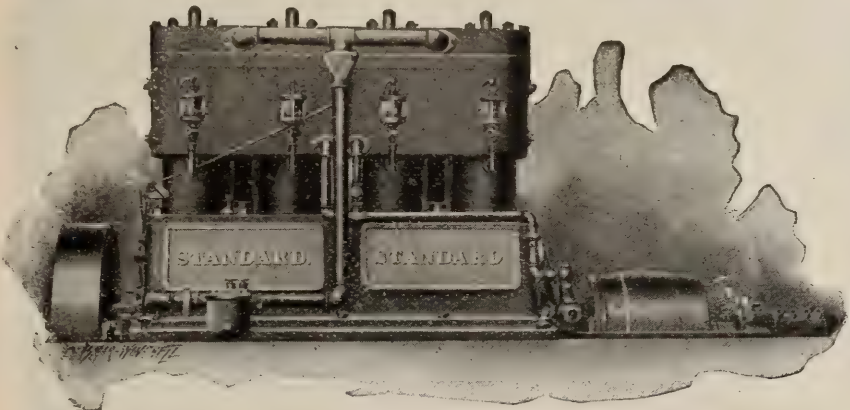

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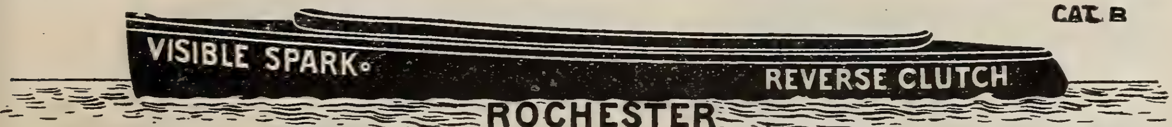

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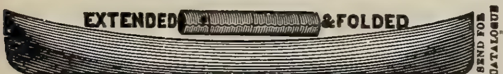

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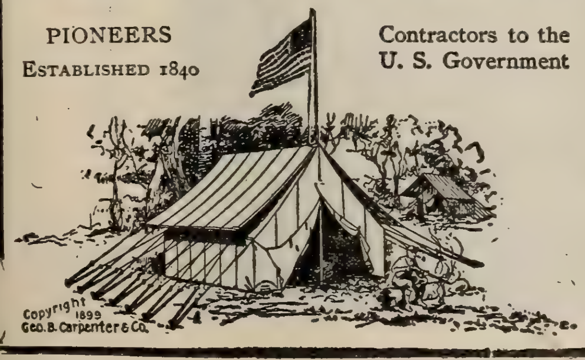
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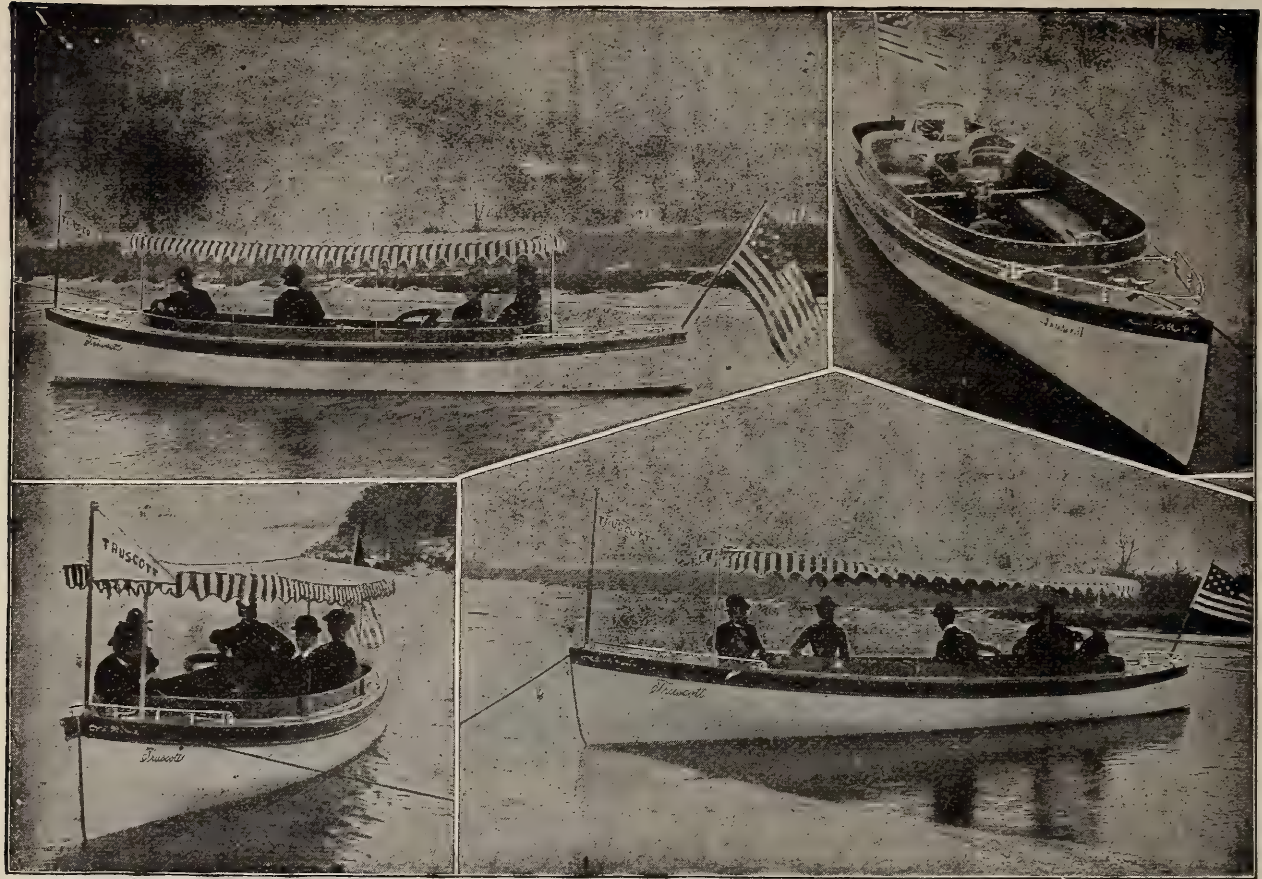

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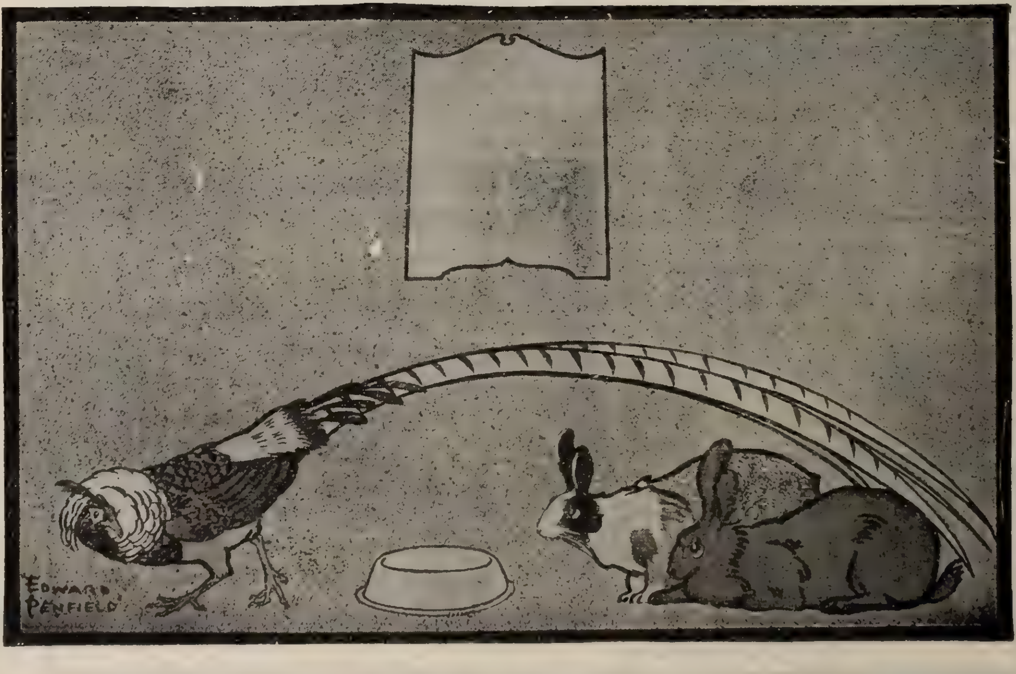
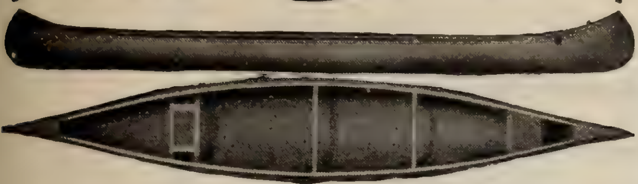


1902 Calendar of Spratt's Patent. See Notice on page xxxii of this issue.

Rushton Canoes

"INDIAN" MODEL



Length, 15 ft.; beam, 32 ins.; depth at centre, 12 ins. Oak, cedar and cherry frame, canvas covered; weight, 65 to 70 lbs. Grade A, $40. Grade B, $32.

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Lengths, 15, 16 and 17 ft.

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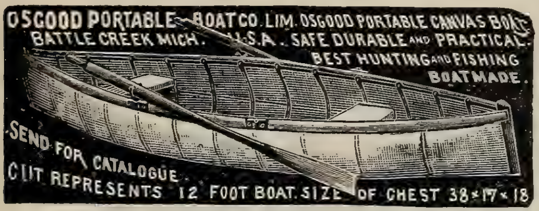
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BATTLE CREEK MICH. U.S.A. SAFE DURABLE AND PRACTICAL
BEST HUNTING AND FISHING BOAT MADE.
SEND FOR CATALOGUE.
CUT REPRESENTS 12 FOOT BOAT. SIZE OF CHEST 38×17×18

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The best fish are where there are no boats. Can be carried on your back or in a trunk.

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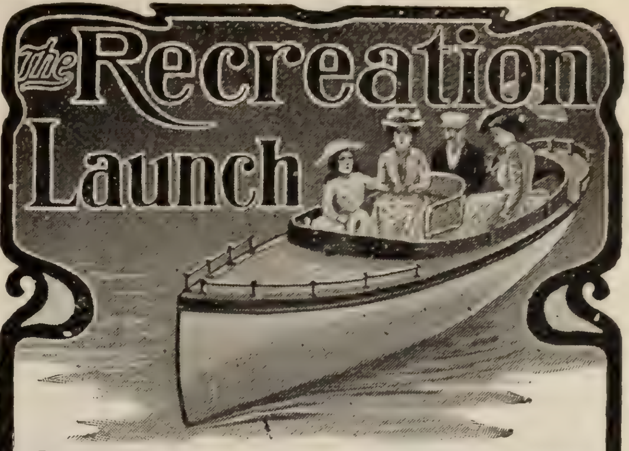
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For those who want the best

Experience and critical discernment add emphasis to our claims for the "RECREATION LAUNCH."

In grace and beauty of design, in thoroughness of construction and finish, in first cost and future maintenance, it excels all others.

Simplicity of Operation

is another feature that will appeal to those who buy for Family use. There is that Safety, Certainty and Security so essential in a pleasure craft. Speed, too, if you want it.

Send 10 cents to cover mailing cost for complete Marine Engine and Launch Catalogue "L."

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KING FOLDING CANVAS BOAT CO
KALAMAZOO, MICH.
Send 6¢ for Catalog.
50 ENGRAVINGS
RIBBED LONGITUDINALLY AND DIAGONALLY
LAST A LIFETIME
CARRY IN A BUGGY
OUR 11 FT. BOAT

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King Folding Canvas Boat Co.,
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Dear Sirs,—The 14 foot canvas boat has arrived. Ha [illegible] used in an Ockl [illegible] aha river trip through the [illegible] re [illegible] p [illegible] fect duc [illegible] and I [illegible] ave nev [illegible] pleasure and [illegible] fit. The b [illegible] could ask in every espe [illegible] t. One [illegible] ask [illegible] of [illegible] ts and ati [illegible]

Sincerely,

Franklin Shields,
1420 Chestnut Street, Philadelphia, Pa.

Send 6c. for Catalogue. 50 Engravings.

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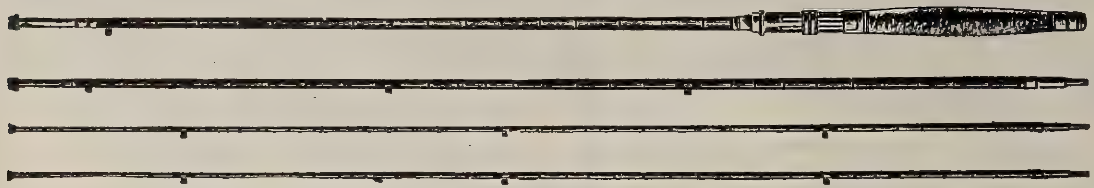
60c for an assorted dozen, Regular price 84 cents. **Bass Flies**



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Fly Rods 10 feet, 6 ounces **70 cts.** **Bait Rods** 9 feet, 8 ounces

3 piece and extra tip, cork grip, in wood form

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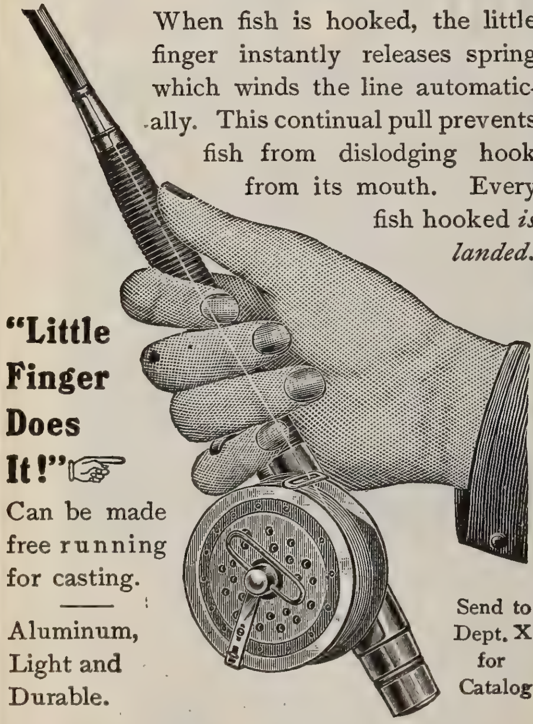
When fish is hooked, the little finger instantly releases spring which winds the line automatically. This continual pull prevents fish from dislodging hook from its mouth. Every fish hooked *is landed.*



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One of the most beautiful of all the California cities, and the city that showed the greatest percentage of growth in the census of 1900, is the "City of Angels," called Los Angeles.

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"Four-Track Series" No. 5, "America's Winter Resorts," sent free on receipt of a two-cent stamp, by George H. Daniels, General Passenger Agent, Grand Central Station, New York.

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That's why he's having so much fun.

A man who fishes with a Bristol rod can have lots of fun whether he gets any fish or not.

But the man who uses a Bristol usually does get plenty of fish.

Therefore, if you want to make sure of a successful day on the water, provide yourself with a Bristol Steel Rod.

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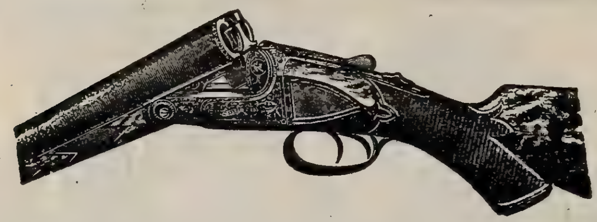

The 201 shooters in this year's event, at Queens, Long Island, N.Y., could not defeat the "OLD RELIABLE" in the hands of an AMATEUR

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Of the 22 men who killed straight, 7 shot **Parkers**, and 86 of the 201 shooters faced the traps with **Parker** Guns.

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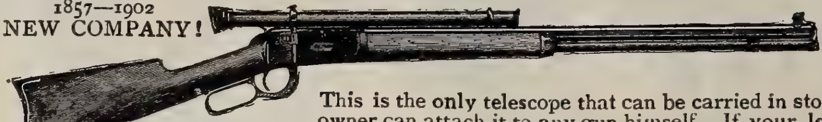

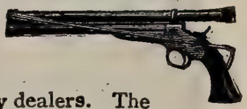

This is the only telescope that can be carried in stock by dealers. The owner can attach it to any gun himself. If your local dealer does not keep it, write us.

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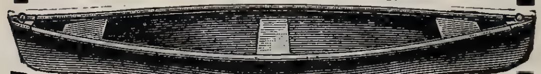
Non-sinkable and indestructible. 14 feet long, 39 inch beam.



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For Sale: 25/20 Winchester repeater; good as new; Lyman sight, canvas case and 100 cartridges. $15. Address,
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For Exchange: A 32-44 S. & W. target revolver for a 22 Marlin or Winchester repeating rifle.
B. G. Palmer, Medway, N. Y.

Wanted: L. C. Smith hammerless gun. Will pay cash. Chas. L. Dougherty,
P. O. 324, Fairmount, Illinois.

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Following are names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

If anyone who may employ one of these guides should find him incompetent or unsatisfactory, I will be grateful if he will report the fact to me.

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John Ching, Kilgore, elk, bear, deer, antelope mountain sheep, trout and grouse.
R. W. Rock, Lake, ditto
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MAINE.

W. C. Holt, Hanover, moose, caribou, deer, grouse, and trout.

MONTANA.

James Blair, Lakeview, elk, bear, deer, trout and grouse.
A. T. Leeds, Darby, ditto
Chas. Marble, Chestnut, "

NEW YORK.

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C. Ferris, Fine, ditto

WYOMING.

Cecil J. Huntington, Parkman, elk bear, deer, mountain sheep, antelope, grouse and trout.
Frank L. Peterson, Jackson, elk, bear, deer, mountain sheep, antelope, grouse and trout.
S. N. Leek, Jackson, ditto
James L. McLaughlin, Valley, elk, bear, deer, mountain sheep, antelope, grouse and trout.
T. R. Wilson, Alta, Uinta Co., elk, bear, deer, mountain sheep, antelope grouse and trout.
Mark H. Warner, Ten Sleep, ditto

CANADA.

Dell Thomas, Jackman, B. C., deer, bear, sheep, goats, grouse and trout.
W. A. Brewster, Banff, Rocky Mountain Park, Can., bear, sheep, goats, grouse and trout.
Wm. S. Andrews, Lillooet, B. C., deer, bear, mountain sheep, goats, grouse and trout.
B. Norrad, Boieztown, B. C., moose, caribou, grouse and trout.

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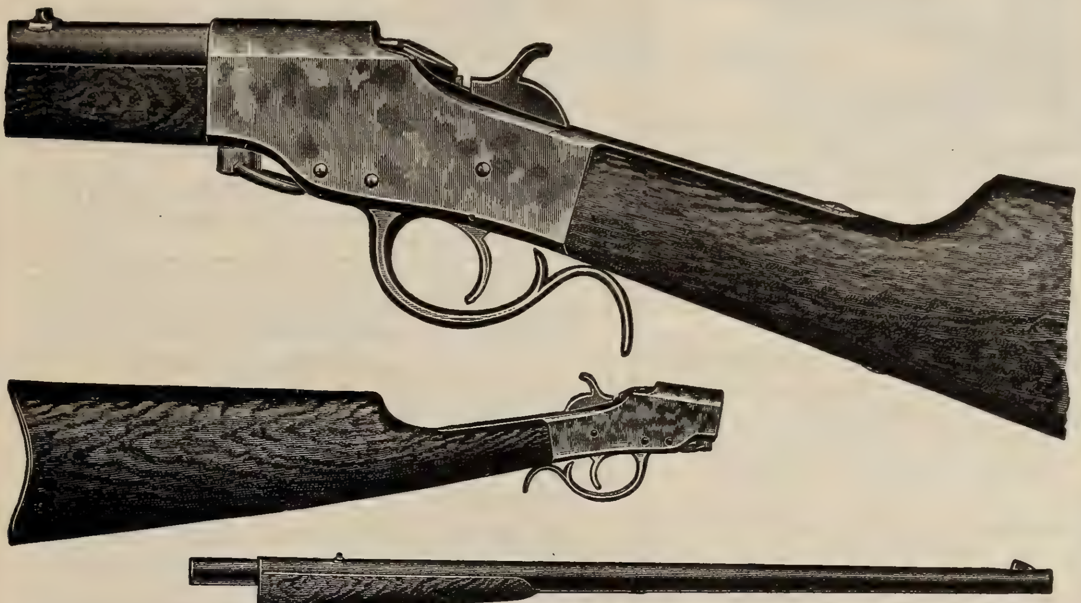
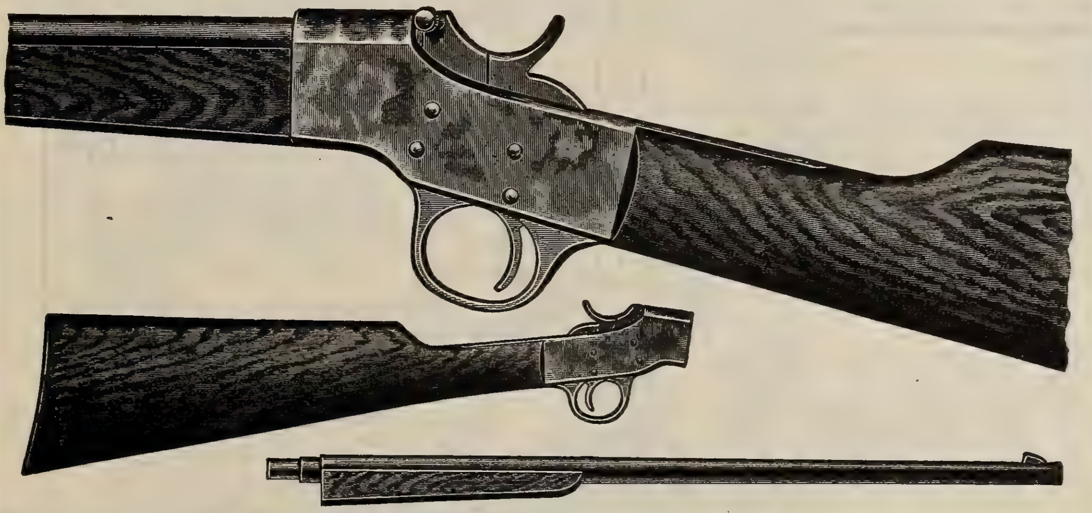


No. 822.—Lever Action, case hardened, walnut stock, rubber butt plate, weight 4 pounds, 20-inch barrel, for 22 R. F. long or short cartridges. **$4.50**



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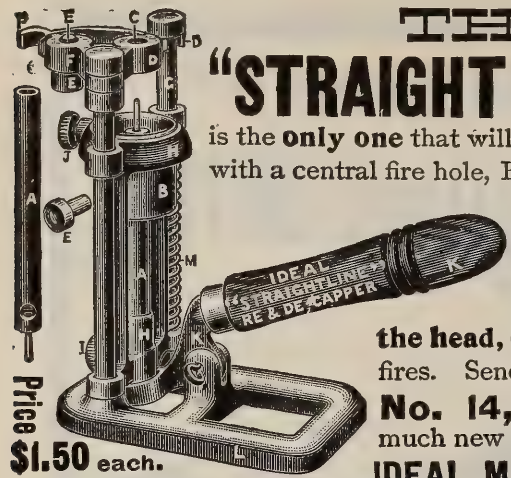
We will ship, all charges prepaid, on receipt of remittance with order, to any express office in the U. S. A. We agree to refund your money if you are not satisfied, provided you will agree to mail us a target made with the rifle we send you. Order while this offer is open.

The Hopkins & Allen Arms Co.

NORWICH, CONN., U. S. A.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is the **only one** that will de-cap and re-cap properly, **all** Shot Gun Shells with a central fire hole, Brass or Paper, Domestic or Foreign make, whatever the inside shape may be, **high** or **low base.** It will seat any and all sizes and shapes of primers, **straight** in the pocket of the shell, **positively all the same depth, without concaving the head, or disturbing the fulminate** which causes missfires. Send us six cents in stamps for **HAND BOOK No. 14,** giving full information of **New Goods** and much new matter of interest to shooters. Address,

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For Sale or Exchange: Ithaca ejector hammerless, 12 gauge, nearly new; excellent condition; Silvers recoil rod. Stevens, gallery pistol, 22 caliber, 6 inch barrel; good condition. One new single barrel, 12 gauge shot gun, full choke. English pointer dog, one year old; worked on quail one season. Warren Dilsaver, Clinton, Ind.

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No. O. SB Fly Rod, 3 piece, 6 strip Hexagon Bamboo, rimmed ferrules, full nickeled mountings, rings, solid metal reel seat below hand grasp, silk wrappings, cork hand grasp, two tips, all in silicia covered, grooved wood form and cloth sack — or — No. 04 SB Bait Rod, same description as No. OSB but it is a bait rod with solid metal reel seat above the hand grasp. Catalogue price	$2.25
Multiplying reel, Rubber Cap, Raised Pillar, Balance Handle, Back Sliding Click, Front Sliding Drag, No. 4904, 80 yds. Catalogue price	.90
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A Great Wooded Island

To occupy the amphitheatre, with a trout stream washing its shores.

Water Falls, cascades,
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To form a realistic and impressive picture.

Some of the exhibits:

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The greatest collection of birds' eggs and nests in the world.

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Pines from the North Woods and palms from Florida will transform the interior of the big Garden

BE SURE TO SEE THE SPORTSMEN'S SHOW

TELESCOPIC RIFLE SIGHTS To suit all manner of rifle cranks and pocketbooks of all dimensions, from the $10 complete outfit to $50 and upward. Our "SNAP SHOT" telescopes are far ahead of any known rifle sight for off-hand and hunting purposes, while the principal rest-shooters find their ideal in our high-grade target telescopes. The highest known scores have been made with their aid. SEND FOR LIST.

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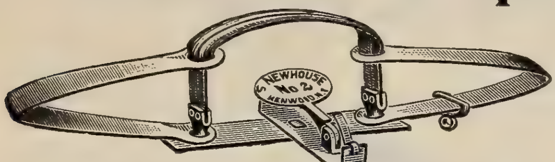

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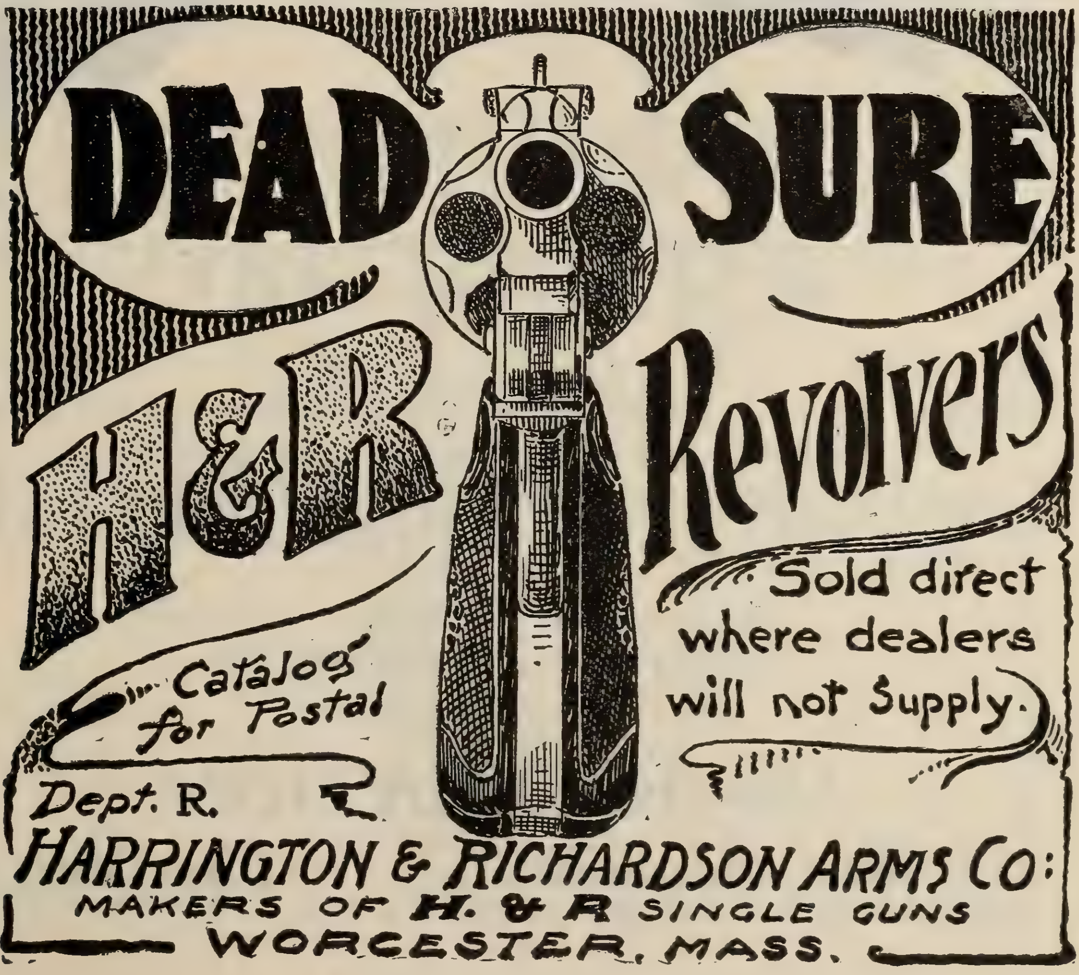

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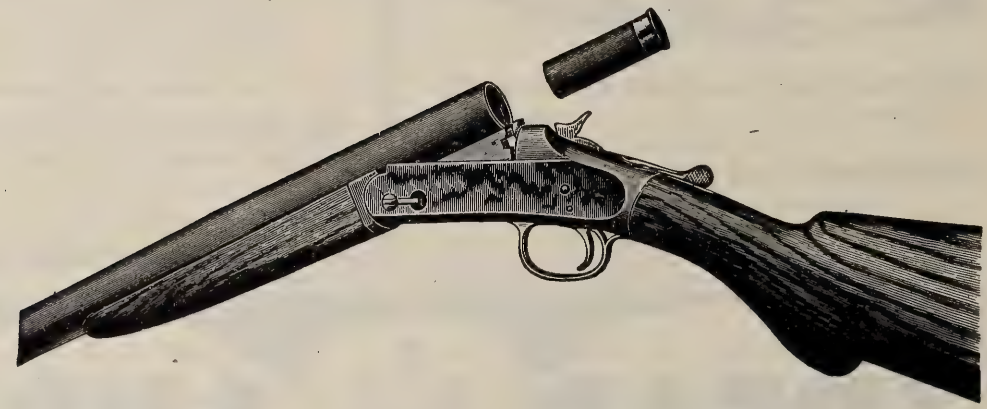

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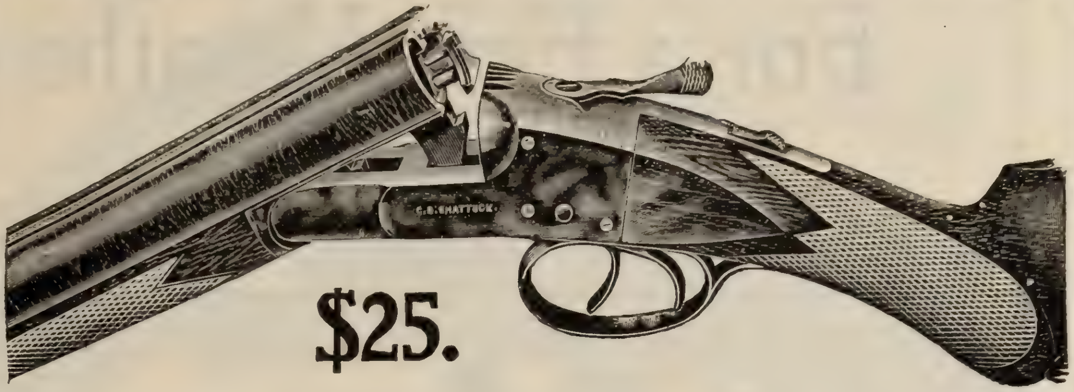

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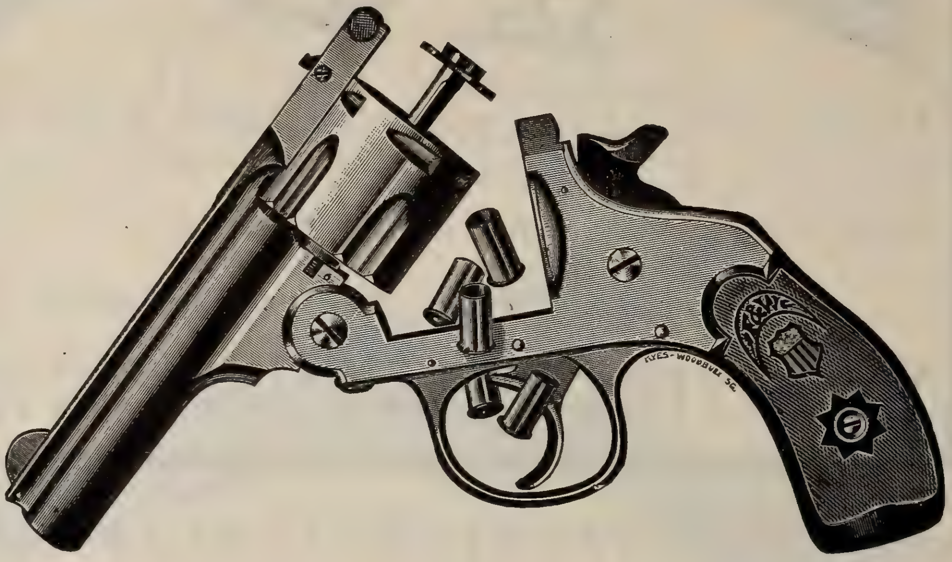
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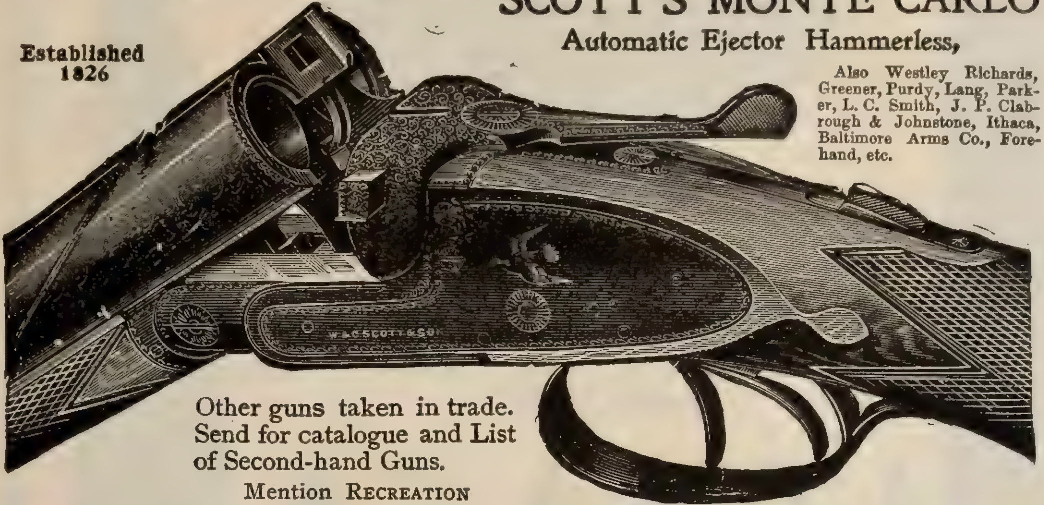

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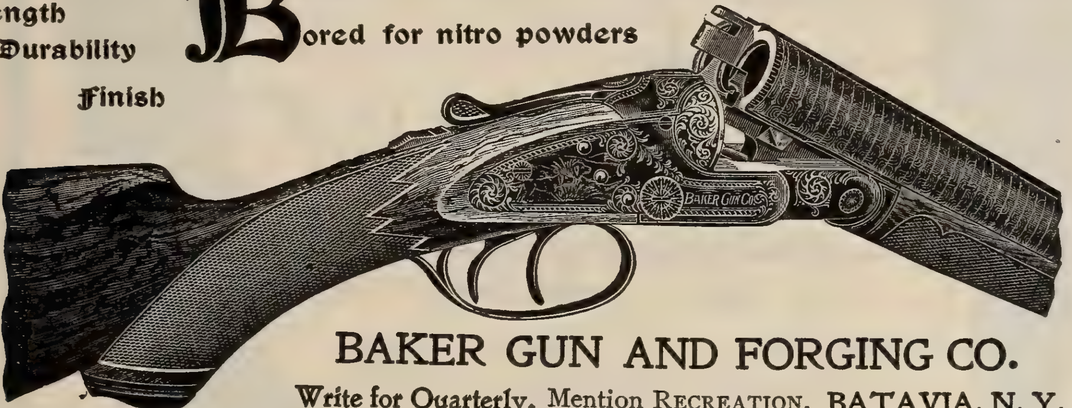
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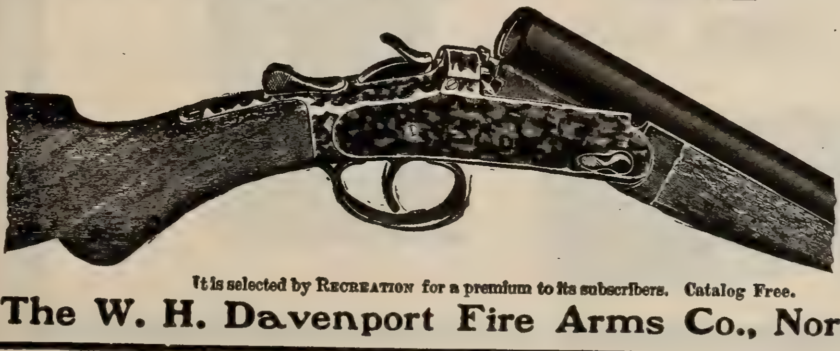

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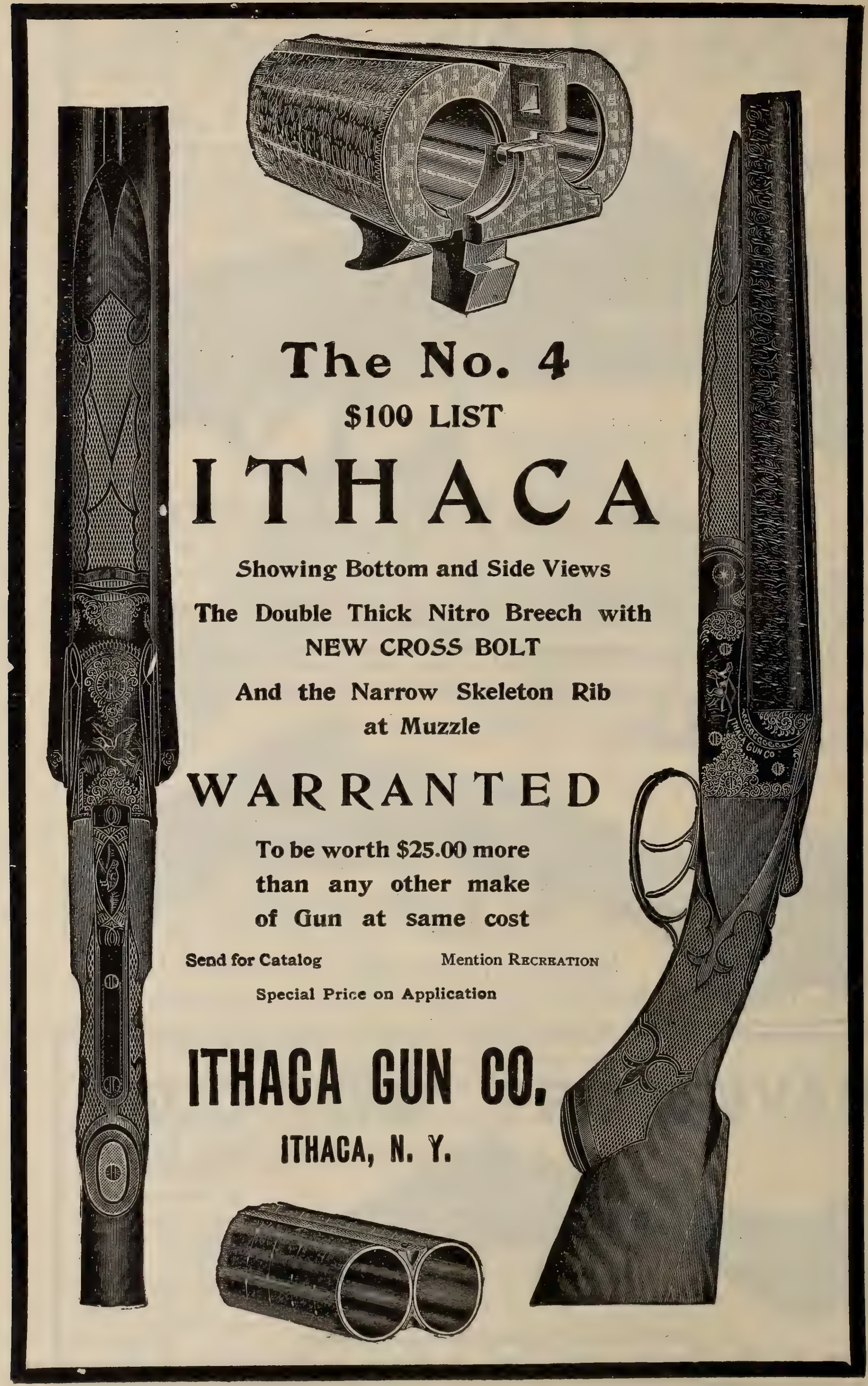

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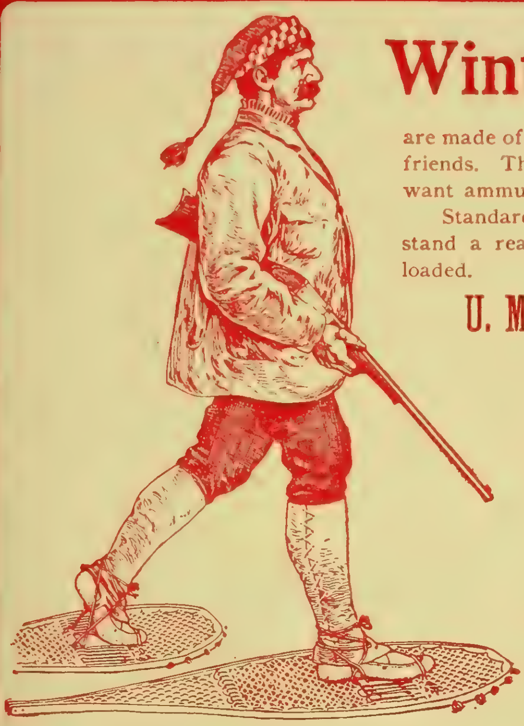

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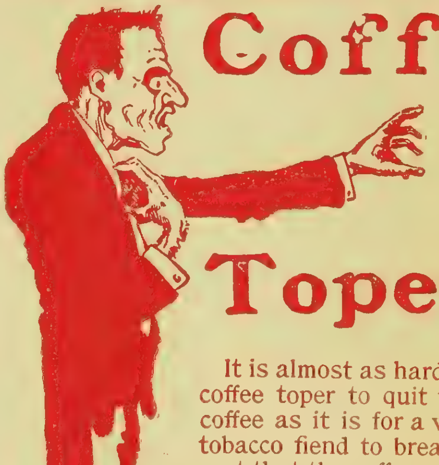

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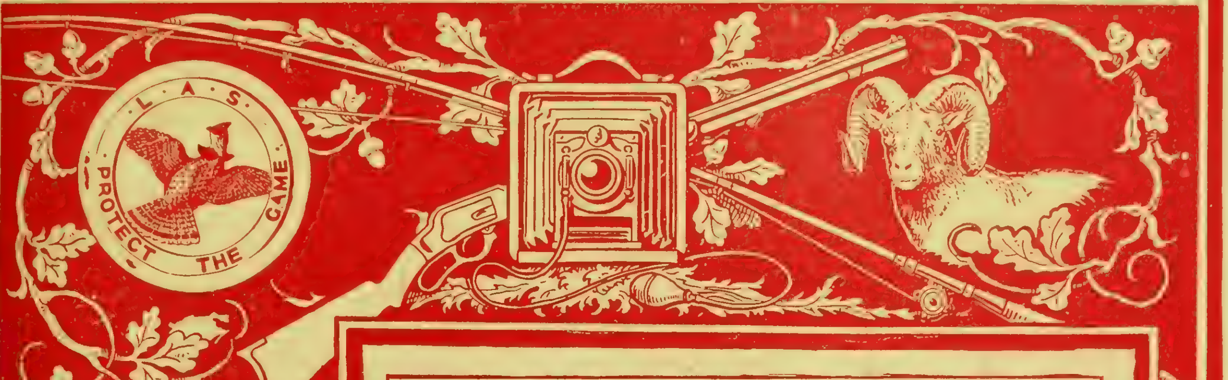

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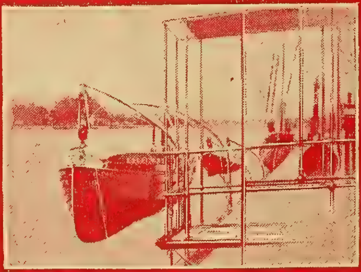

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CONTENTS OF THIS NUMBER

PAGE
She Came and Sat Down in Front of My Shelf .... FRONTISPIECE
The Hunted Hunter. Illustrated .... J. W. HULSE 249
The Valley of Forgetfulness. Poem .... E. H. BUTLER 250
Nesting Time. Illustrated .... ANNA M. MATTHEWS 251
Whip-Poor-Will. Poem .... IMO L. STOUT 257
An Incident of Angling. Illustrated .... J. T. HOPKINS 259
In Exile. Poem .... WARREN ADAMS 261
A Bear in Camp .... W. F. NICHOLS 262
A Southern Bear Hunt. Illustrated .... FRANK FARNER 263
Hunting in Mexico. Illustrated .... CHARLES WILMOT 267
Seeing the Old Century Out. Illustrated .... SIDNEY M. LOGAN 269
Self Defence with the Revolver. Illustrated .... JACK PATTERN 277
Camping in Colorado. .... DR. J. N. HALL 279
The Man Behind the Gun. Poem .... C. L. BAILEY 282
From the Game Fields 283
Fish and Fishing 291
Guns and Ammunition 295
Natural History 301
The League of American Sportsmen 305
Forestry 312
Pure and Impure Foods 315
Book Notices 317
Editor's Corner 318
Publisher's Notes 319
Amateur Photography 323

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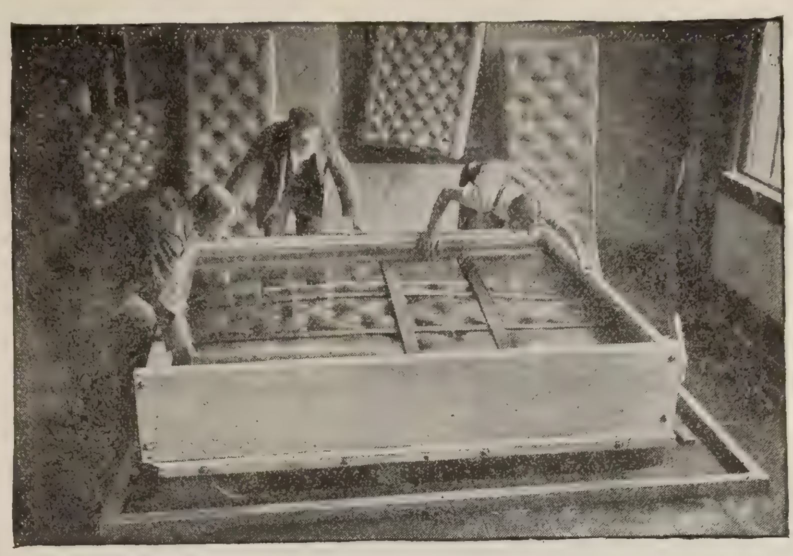

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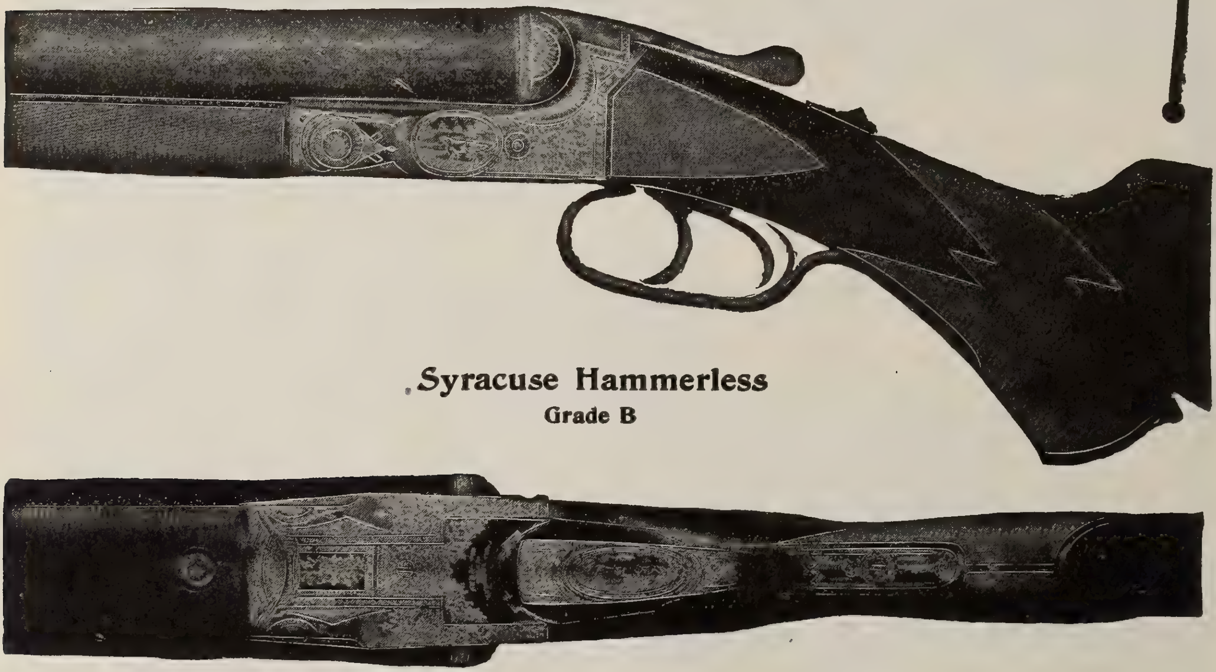

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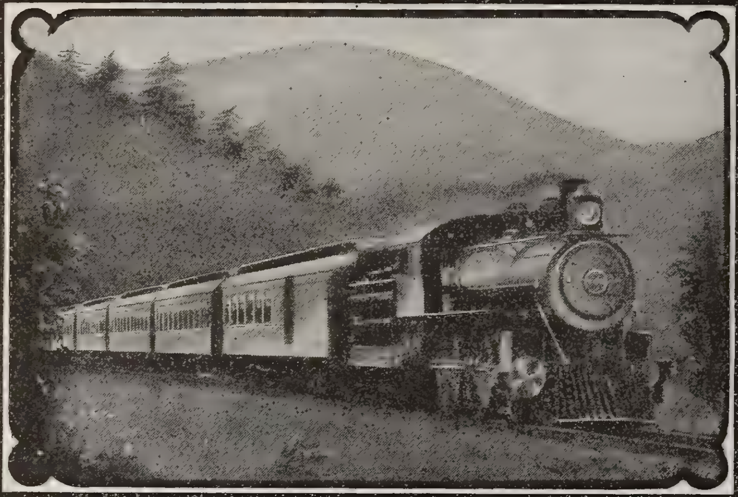

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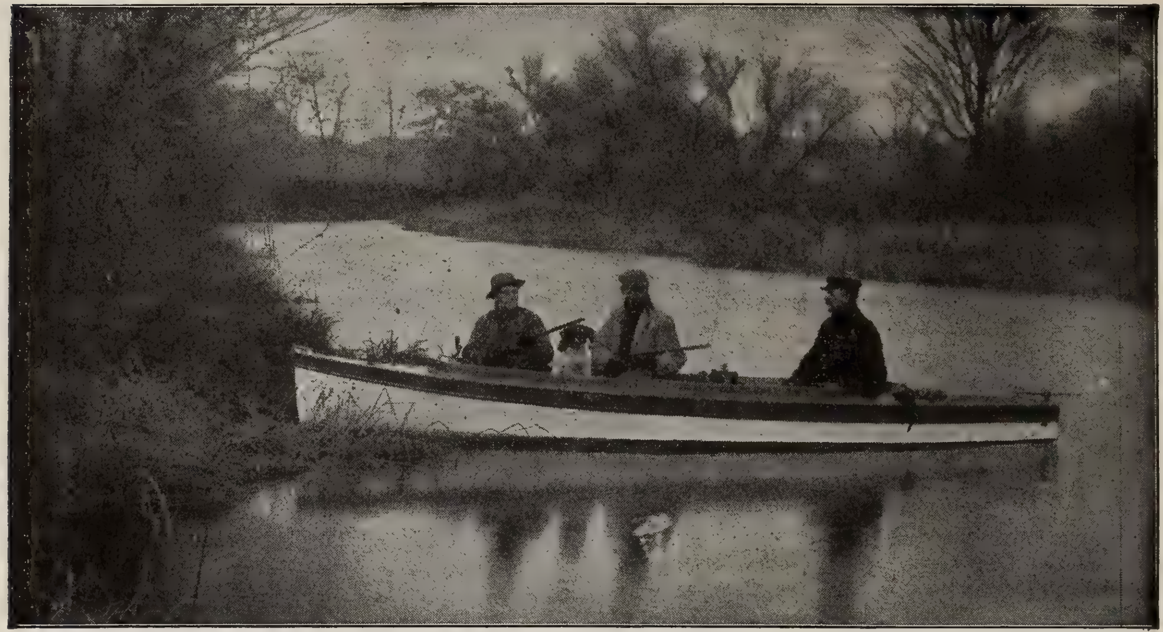

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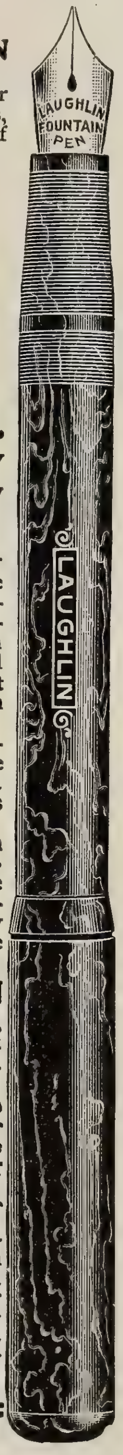

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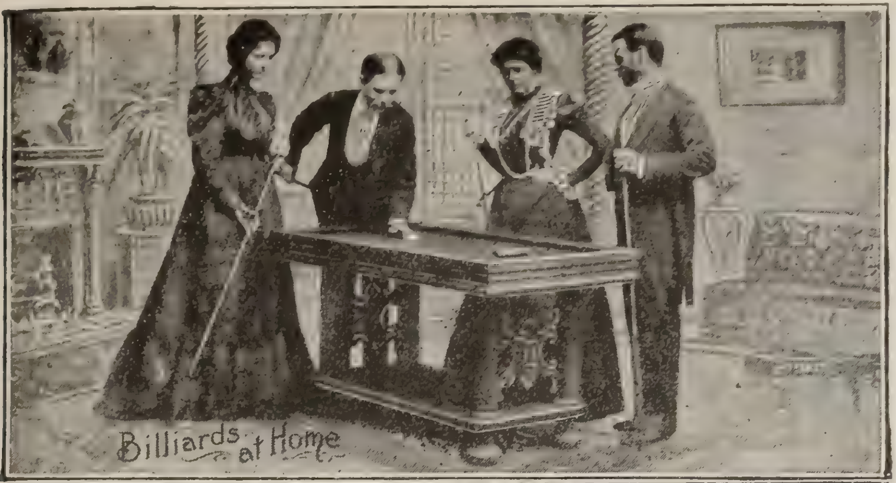

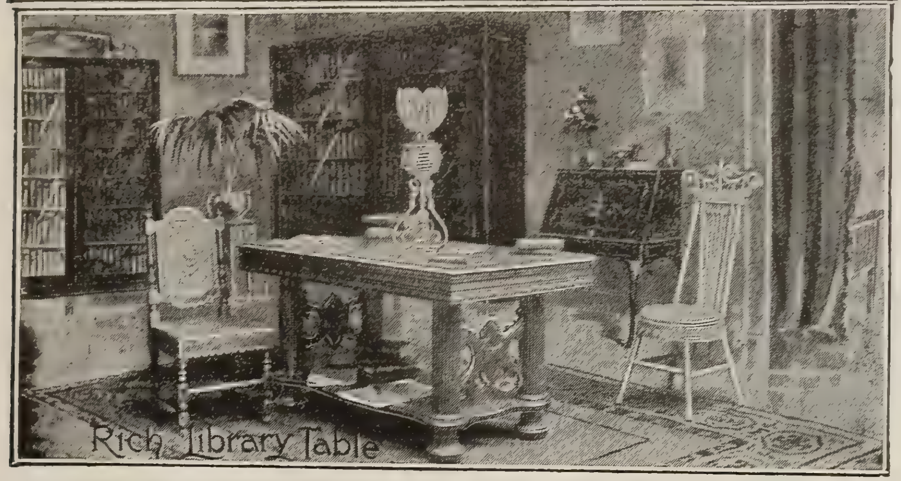

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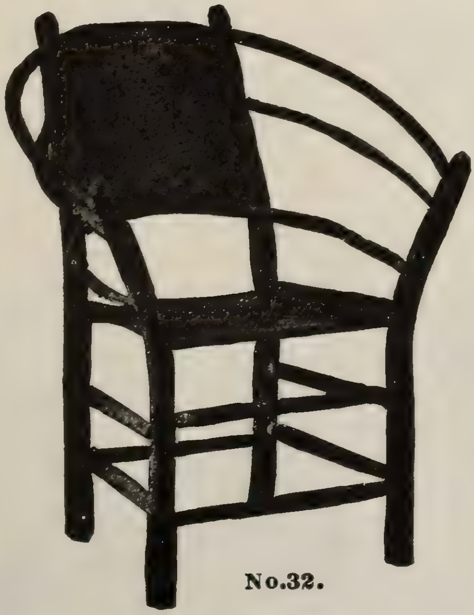

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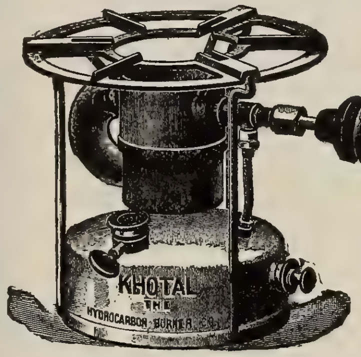

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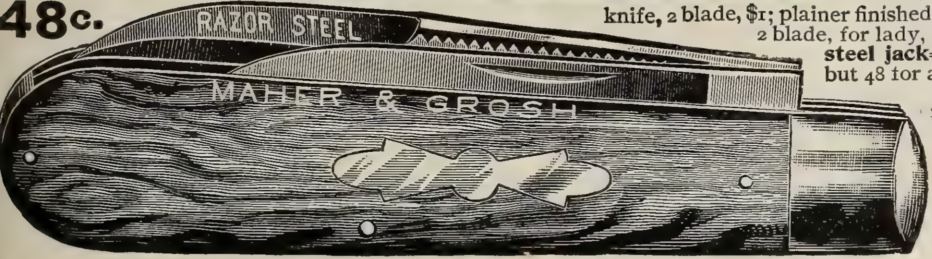

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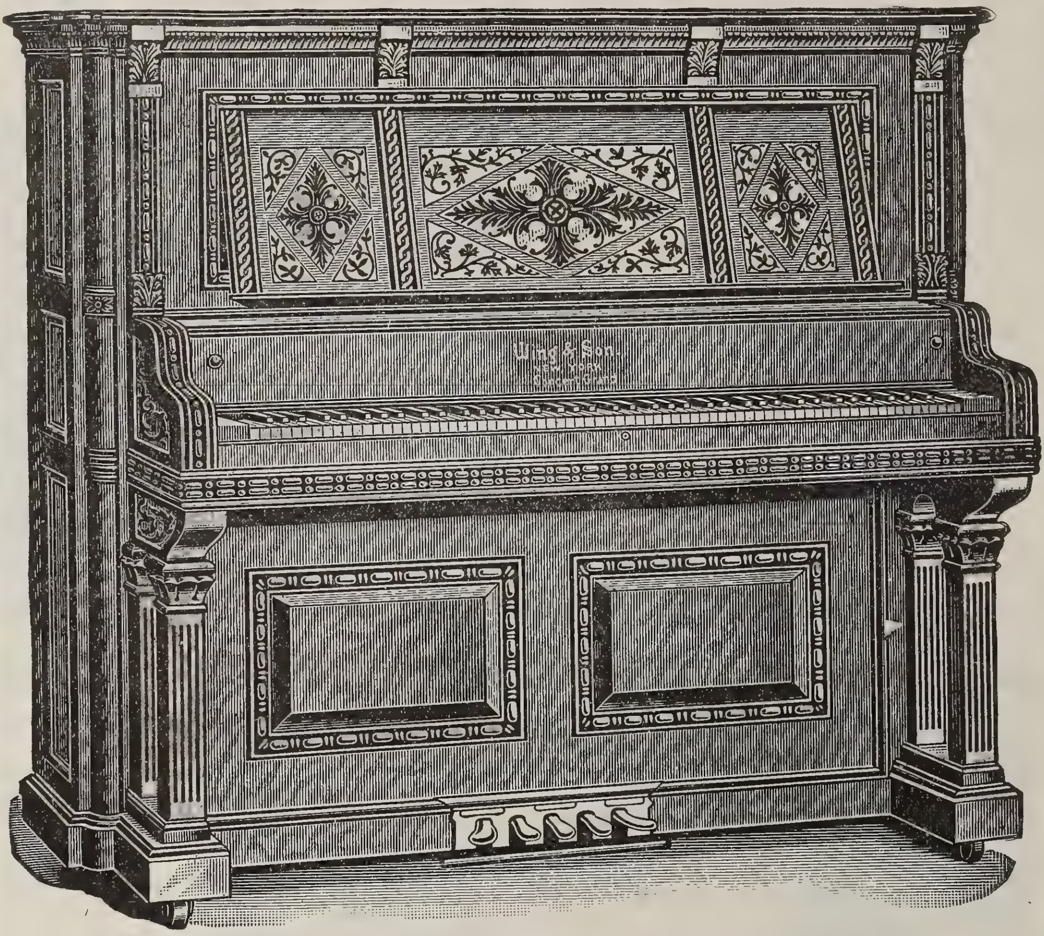

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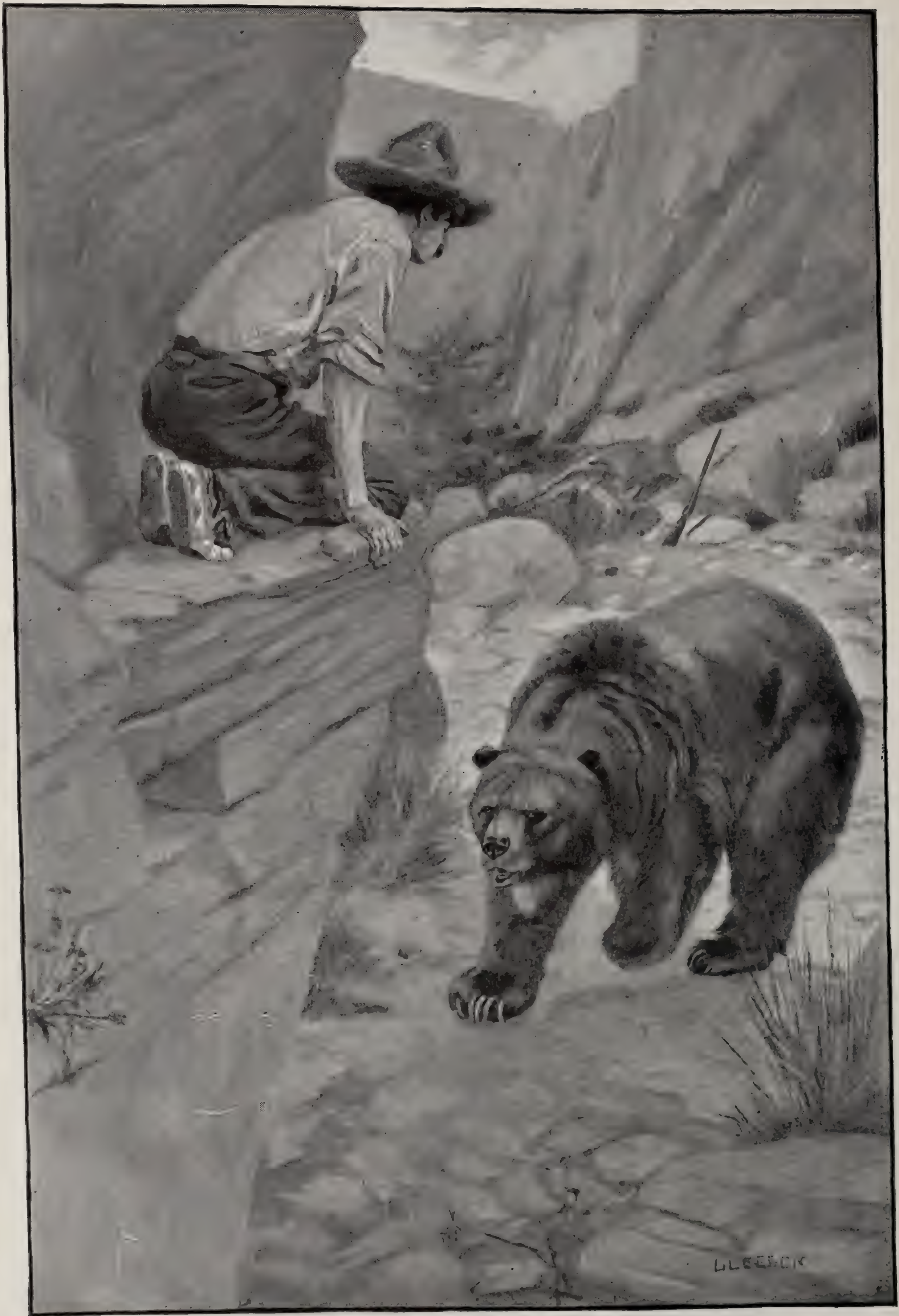


SHE CAME AND SAT DOWN IN FRONT OF MY SHELF.

RECREATION

Volume XVI. APRIL, 1902. Number 4.

G. O. SHIELDS (COQUINA), Editor and Manager

THE HUNTED HUNTER.

J. W. HULSE.

Our sheep camps were 40 or 50 miles South of Bent's old fort, on the Arkansas river. The country was broken and cut up with canyons. For sportsmen it was indeed a happy hunting ground. Every fall the great migratory buffalo herd, after crossing the Arkansas, would spread out *en route* to the Canadian country and the *Llano Estacado*, or staked plains. Countless numbers of antelope, mule deer and Virginia deer, a few elk and bear, wild turkeys and sage hens furnished unlimited sport, as well as meat, for the herders. The sheep were divided into several herds, one of which was visited each day. Returning from one of my daily tramps, I was walking through a large canyon from which smaller ones opened out on either side. When within a short distance of the home camp a fair sized mule buck broke cover from a bunch of willows almost within reach of my gun, and so startled me I did not think of shooting until he disappeared into a side canyon about 100 yards ahead. Walking along leisurely until I reached the mouth of the canyon, I saw my deer within easy range, and dropped him with a bullet just back of the shoulders, but as I approached he sprang to his feet and ran on and around a bend. I followed and found him apparently dead; so I took off my cartridge belt, drew my knife from the scabbard and hung the belt over the muzzle of my rifle, which I leaned against the rocks. When I started to bleed the buck he struggled to his feet again, to my great astonishment, and moved on 25 or 30 yards before he fell. While he was breathing his last I looked around and discovered that the canyon was a box, or blind one, the only outlet being the inlet. I wiped my knife and was cutting some tobacco for a smoke, when a noise behind me caused me to look around, and there, alongside of my rifle, was an old grizzly, standing on her hind legs and eagerly sniffing toward the fresh meat. She was not so large as Jumbo, yet at the moment she looked as if she nearly filled the canyon, which was over 20 yards wide. I had read of combats between men armed only with a knife and bears of all species, but no such plan entered my mind. A vision of a ladder flashed through my brain, and a good many other thoughts as well. It seemed quite a time, yet I really had but a few seconds to study the situation before the bear started for me, and I for the end of the canyon, about 30 yards distant. As I ran toward the perpendicular wall I saw a ledge projecting out, about 10 feet from the ground. I leaped for it and caught it, but my fingers slipped and down I went. I tried again and missed, but the third time I succeeded in getting a firm hold and scrambling up on the shelf, which was about a foot wide and 3 or 4 feet long, sloping upward. I could not have climbed it had I not worn moccasins, which enabled me to get a toe hold in a crevice. As I made the last jump I fancied I could feel the hot breath of the bear on the back of my neck, yet when my position was firm enough so I could look around she was some yards distant, and had stopped. She was evidently very hungry, for after a warning growl she turned back to the meat, took up a ham and commenced her meal. After eating rapidly a while she looked around at me, then ate more leisurely, first from one piece, then from another, until she was satisfied. After that she came and sat down in front of my shelf, licking her paws, looking at me and, I suppose, laughing at my predicament, while I was getting madder every minute. My position was extremely uncomfortable, my fingers and knee having been bruised in climbing. In fact, I had a burning desire to go home and smoke my pipe by the camp fire. There was no such thing as getting up any higher, so I had to grin and bear it. Finally my jailer started slowly away, smelling at the gun as she passed it. As soon as she turned the bend I tumbled down, but both legs were numb, so for a few moments I could not walk. I managed to get to the gun and buckle on the belt, and in a short time reached the mouth of the canyon. There, not more than 50 yards away, was Mrs. Bruin, drinking from a little spring. I could not repress a shout of exultation, at which she looked up, but before she could move from her tracks a bullet from my old Springfield went crashing through her neck at the base of the brain and her foraging days were over. In skinning her I found a bullet embedded under the hide next to the ribs on the right side. It was from a carbine and but slightly battered. After looking her over when dead she did not appear more than half so large as on first view. I have seen several much larger bears since.

THE VALLEY OF FORGETFULNESS.

E. H. BUTLER.

Oft in the silence of the midnight hour,
I dream of mystic vales that spread between
Our dusty journeys; or the pleasant green
Of little islands, fresh with shade and shower.
What of the weary ways, if in thy bower
With thee in solitude I lie unseen,
And dream of that which is, or ne'er has been;
Alike fantastic figments of thy power.
Love, let us hasten from the traveled ways
Which men call Life, across the dreamy dew
Of fields forgotten, where the robins sing;
Till in the breaths of sweet, narcotic haze
I find the Lethe, and forget with you
Our many weary miles of wandering.

NESTING TIME.

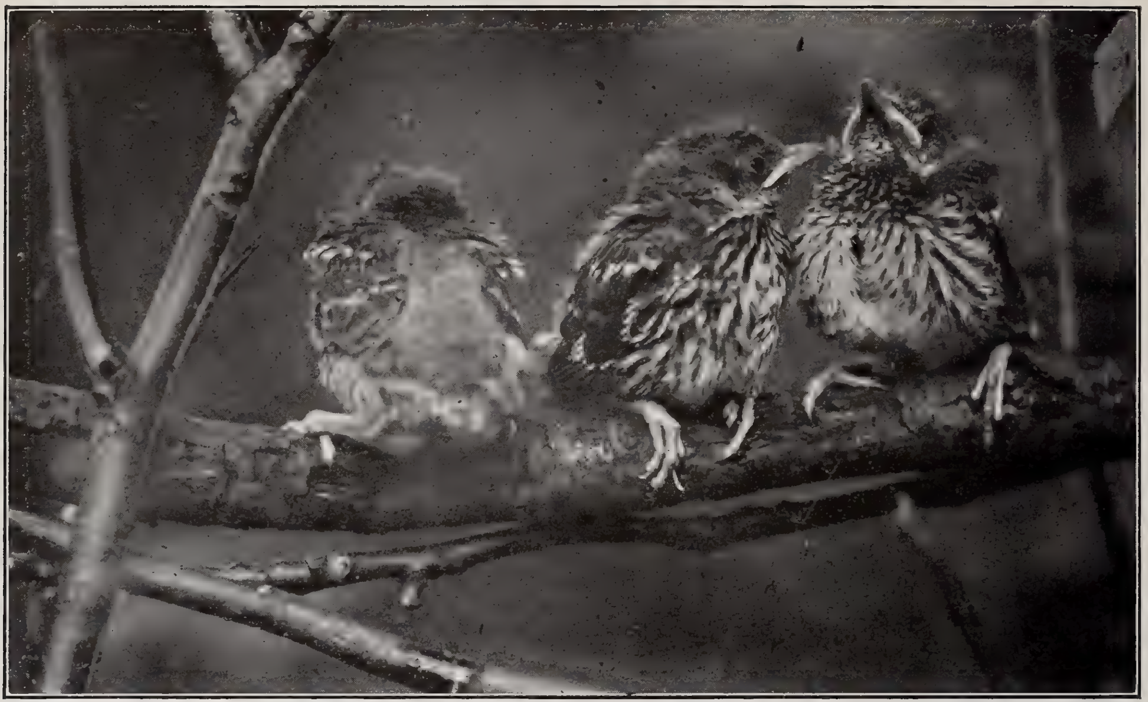
ANNA M. MATTHEWS.

Photos by the Author.

To the amateur photographer living in a large city the study of bird nature would appear limited to observing the habits of the unpopular English sparrow, and, if near a large body of water, of gulls. He knows that the more venturesome birds may be found in parks, and he may have read that in the great parks of New York City a bird lover has identified more than 120 species. But that a great variety of birds common to the latitude may be found just outside the city, where, undisturbed by the attention of the curious, he may use opera glass and camera, is not fully appreciated by snap-shotters, nor even by those who attempt more serious work with tripod and time.

NEST OF THRUSH.

While all amateurs may not find it desirable to equip themselves with the full paraphernalia of the bird photographer, yet much may be accomplished in leisure hours or short vacations with no other outfit than a camera with a fairly good lens, a stout tripod and an opera glass. Even if the artistic results are not altogether gratifying, the contact with nature as a physical and psychic tonic will produce marked results. Less than a mile from Chicago is a



YOUNG THRUSHES.

practically unoccupied territory, including meadow and field and terminating in a strip of woodland along the Desplaines river. Being a little removed from the straggling suburban residences this meadow and woodland are favorite resorts for birds.

In the latter part of February, 1901, the first robins appeared in a clump of trees in the meadow, and about the first of March a pair of song sparrows and a pair of

YOUNG CUCKOOS IN NEST ON HAWTHORN BRANCH.

meadow larks arrived. The delight of finding those early visitors amply rewarded a tramp through the snow-covered fields and made the results of an unlucky venture on thin ice seem of little consequence.

During the last week of April and the first week of May the warblers arrived. After 2 to 3 weeks most of them sped Northward. Before the middle of June we had with us for the summer the 3 early comers already mentioned and the horned lark, brown thrush, wood thrush, catbird, redheaded woodpecker, golden-winged woodpecker, yellow-billed cuckoo, red-winged blackbird, purple grackle, cowbird, tanager, oriole, kingfisher, flycatcher, shrike, indigo, bunting, dickcissel, phoebe, bluebird, lark finch, goldfinch, pewee, rose-breasted grosbeak, humming bird, turtle dove, upland plover, woodcock, sandpiper and numerous species of the bunting, sparrow and finch families.

Even desultory observation convinces one that the hardship endured by birds in their domestic aspirations is great. Only a small per cent. of eggs laid are hatched; the greater number falling a prey to snakes, birds and boys. Of the small number hatched comparatively few reach maturity, for added to the destroyers of eggs are the birds of prey and the prowling cat.

The robin, the most numerous and familiar of the birds in this vicinity, the English sparrow excepted, builds too high for the amateur who is not an expert climber. While the bird is brooding the telephoto may be used to advantage. Any active lad will gladly lend his aid in removing the fledglings from the nest just before they are ready for flight. They may be allowed to run on the ground until weary, and with their awkward gait and untried muscles they soon tire. Then perched on a branch or a stick they may be photographed. The parent birds will, of course, manifest much uneasiness during the process, but on the young birds being safely returned to the nest, the distressed cries of the parents cease, and the confidence of the robin in her big human brothers is doubtless augmented.

The nests of the thrush and the catbird, being built in low trees and shrubs, are easily accessible. Little difficulty is experienced in finding the nest of a thrush, as before or while she is brooding a slight alarm causes her to leave the nest and hover near its place of concealment, repeating her sharp cry of warning. She

NEST OF MEADOW LARK.

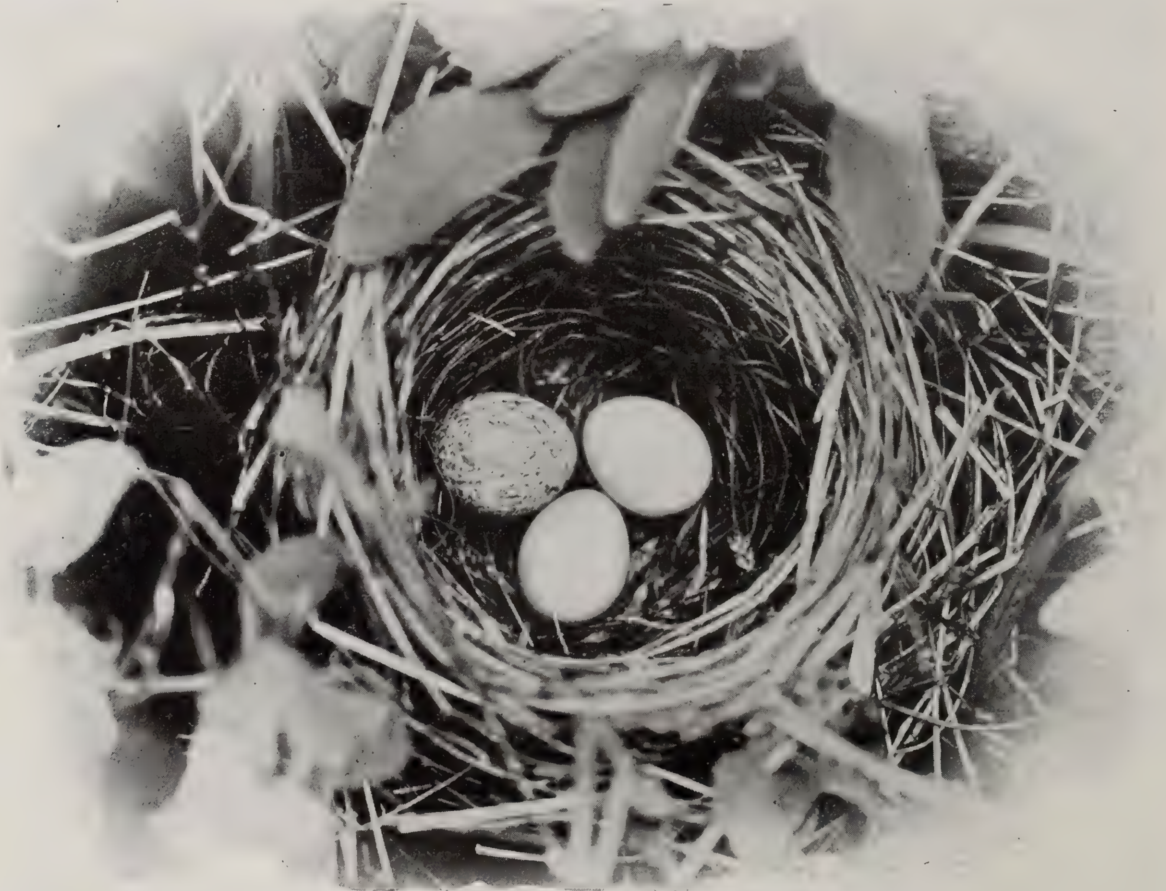
is more discreet, however, after the young are hatched, and avoids discovery by quietly slipping from the nest and stealing away among the leaves and grass. The persistency of the thrush and its lack of discretion were shown by a pair whose domestic joys and discomforts were watched with much interest. The first nest of the pair was lodged in the crotch of a wild plum tree about 6 feet above the ground. The bird when discovered was brooding. A subsequent visit showed the nest robbed and the pair busily building another a few feet from the first and in a more exposed location. By some meddlesome visitor the second nest was destroyed. A third was immediately constructed on the same branch as the second, a little nearer the trunk of the tree, but no less exposed. As a reward of persistency a sturdy brood was graduated from the third nest.

A nest from which 3 young birds were taken was about 4 feet from the ground, loosely constructed of twigs and grass in a tangle of hazel and wild honeysuckle. The removal of the birds brought both parents screaming and dashing viciously at the intruder. One little fellow was left cowering in the nest. When the 3 were returned it was found that the fourth had scrambled from his place of safety and disappeared. Although a careful search was made he could not be found. I consoled myself with the thought that, when quiet was restored and he ventured from his place of hiding, his cries of hunger would bring response from the parent birds.

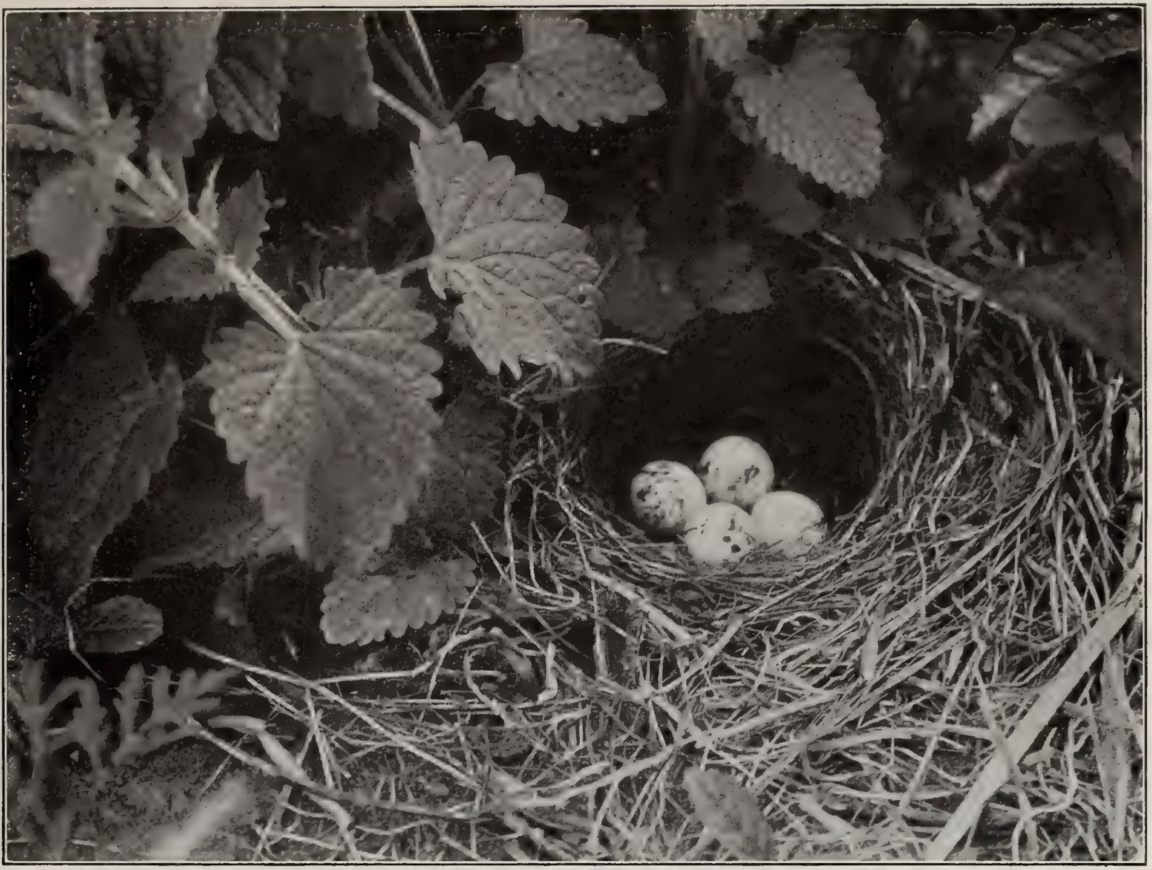
Still another thrush's nest was found in a mass of dead branches lying on the ground, canopied by a wild grape vine. It contained 4 pale speckled eggs one day, but on the next an empty nest gave evidence of a visit from boy, bird of prey or snake. Another nest of the same bird, built in a gooseberry bush against the trunk of a large tree, met the same fate.

A familiar friend, and one whose song rivals that of the thrush, is the catbird. In spite of her seeming friendliness at other times, she becomes shy when her nest is approached.

The yellow-billed cuckoo makes her home in places similar to those selected by the thrush and catbird, although the nest is sometimes higher above the ground and often near a stream. The nest is crude, consisting of coarse twigs, loosely placed on the branch of a tree. The only cuckoo's nest I found last season in the strip of woodland to which my nest hunting was confined was on a low branch of a hawthorn tree and well concealed by leaves and



NEST OF DICKCISSEL CONTAINING EGGS OF COWBIRD.



NEST OF LARK FINCH.

blossoms. When discovered the bird sat quietly on the nest for a time, making close observation possible. Unfortunately the camera was not at hand. The next day a cautious approach sent her flying from the nest. Nor would she return while the nest was watched, although her 2 meagerly clothed fledglings wailed with hunger. Because so difficult to find and so curiously constructed, the discovery of the nest of the meadow lark is always gratifying. The first one of the season I found in a tall tuft of grass near the corner of an unused lot, and but a few steps from the cropped grass of the golf links. What appeared a small collection of withered grass in the green turf proved the beginning of a tunnel 8 inches long and 3 in diameter, at the inner end of which was the carefully constructed nest containing 5 speckled eggs. This proximity to civilization met with the usual disastrous result of misplaced confidence. A day or 2 later eggs and nest had disappeared. Luckily for birds their mourning is of short duration, and the absorbing activity of constructing a new nest soon fills them with a sense of domestic felicity.

Early in May the male bobolinks, with black coat splashed with white and buff, and cap of yellow, take possession of our meadow and impatiently await the coming of their modest-colored partners. The nest of the bobolink is on the ground. A slight hollow is made at the root of a bunch of weeds or tall grass and thinly lined with dry grass. In this simple nest are placed 6 or more whitish, brown speckled eggs. On being disturbed or warned of danger the female leaves her nest by silently creeping through the grass to a safe distance, then rising abruptly as if for the first time aware of the intruder's approach. Thus to locate the nest a circuit of considerable extent must be examined.

One of the cheeriest and most welcome of the summer visitors is a small, grayish colored bunting whose "Dick-cissel-cissel" resounds on every side. The nest is usually secreted in a tall, swaying growth of weeds. It is frequently used by the cowbird as a repository for one of her eggs, the mottled brown of which contrasts strangely with the delicate blue of the small egg of the dickcissel. Unlike most birds in this vicinity the dickcissel forsakes her nest if its surroundings are disturbed.

The most delicately constructed ground nest I found was that of a lark finch, snugly located close to the root of a bunch of weeds, protected by an overhanging nettle and twist of wild morning-glory vine.

One of the most improbable places for a nest was that selected by a pair of bluebirds. It was in an erect iron cylinder about 4 feet high and 5 inches in diameter. The young birds remained in the nest until able to fly. Then, one by one, assisted by the mother bird, they scrambled to the top of the cylinder and took refuge in the branches near.

The familiar call and resounding tapping of the woodpecker announced his arrival early in May. It is strange that with so many trees to choose from the redheaded woodpecker frequently selects telephone and electric poles as nesting places. The golden-winged woodpeckers, however, almost invariably select trees in accessible localities.

YOUNG GOLDEN-WINGED WOODPECKERS.

Because of the merciless slaughter by sportsmen the woodcock is becoming a rare bird, and for that reason the discovery of a pair in our woodland afforded keen delight. When searching for thrushes' nests in May I came suddenly on a fine male woodcock in the shelter of some hazel near the edge of a grassy marsh. Although less than 5 feet distant the beautiful creature seemed to consider himself unobserved and remained motionless. His coat of golden brown, long, graceful bill and large brilliant eyes fascinated me. In about 2 minutes he moved off, quietly creeping over and under fallen twigs and branches. On a slight noise near at hand he rose with characteristic whir and disappeared beyond the trees.

Among other birds which are disappearing is the upland or field plover. Being a delicate morsel for the epicure, the species is well nigh extinct. However, a ramble across the meadow resulted in seeing a female plover rise from the tall grass, and with a continuous succession of sharp notes fly about in a seemingly distracted manner. Back and forth and around she flew, occasionally alighting in the grass, only to rise again and flutter away in an opposite direction. Diligent search failed to discover her nest, which she carefully hides after the manner of the meadow lark.

While searching for the plover's nest I was highly amused by the temerity manifested by 2 young crows. Proud of their newly acquired ability to fly, and not yet having learned that mankind in general is the enemy of the crow, they came flapping over me not 20 feet in air. They were met by the mother crow, whose voice sounded harsh as she reproved their foolish adventure. The speed of the 2 innocents was quickly accelerated and they were soon high in air, speeding toward a place of safety.

YOUNG FLICKERS.

In calling attention to some of the feathered inhabitants of those few acres I have no thought that the locality is specially favored, overrun as it is by children, picnickers and golfers. On the contrary, I am convinced that on the outskirts of any large city many more species than those recorded may be found. Only the large and more familiar birds have been named, those whose nests are easily found. If the observer be ambitious he will find ample employment for the leisure hours of more than one summer vacation in following, field glass in hand, the great variety of sparrows, buntings and warblers, whose coats so perfectly harmonize with the colors of leaf and bark, and whose small bodies may be hidden by a maple leaf.

WHIP-POOR-WILL.

IMO L. STOUT.

The poem entitled "Whip-poor-will," in July RECREATION, brings up old memories, and I enclose a poem under the same caption which was written by a sister on her sick bed a short time before her death, 9 years ago. She was then 16.

M. G. Stout, Mackinaw, Ill.

Mid-April has come, and I list for a call,
In the soft, hazy gloaming so still;
And I wait for the voice of a friend that I love—
The song of the blithe whip-poor-will.

A sound from the thicket—I listen again—
Oh, joy! and my heart seems to thrill
With an ecstasy sweet, as I hear the glad notes,
"Whip-poor-will! whip-poor-will! whip-poor-will!"

So loud and so clear, yet so earnest and true—
Art thou calling thy love from the hill?
Yet call once again, a reply will soon come,
Now hearken, and hear "Whip-poor-will!"

The months pass away, and my joy is complete;
For each evening, o'er treetop and rill,
When the sun has gone down, there comes ever the song
Of the brave, cheery-voiced whip-poor-will.

But the autumn comes on, thy refrain seems more sad,
As a plaintive note sounds in its trill;
And the call that now comes from thy mate on the tree
Is sweet as she sings "Whip-poor-will!"

Ah, I know of the treasures you cherished so true,
In the nest at the foot of the hill.
Now you wait and you dream as we poor mortals do,
When we list for a voice that is still.

For your birdlings have flown, while your lonely hearts ache,
And your song on the night air so chill,
Sounds mournfully sweet, as you answer and call
"Whip-poor-will! whip-poor-will! whip-poor-will!"

My own yearning heart will cry out when you're gone,
For with music its depths you did fill;
And the hours will seem long, as I listen in vain
For your sweet "Whip-poor-will! whip-poor-will!"

But when spring comes again, may your voices be heard
Through the blossoming valley so still;
And may hearts be made glad as they welcome your song,
"Whip-poor-will! whip-poor-will! whip-poor-will!"

AMATEUR PHOTO BY H. G. HIGBEE.

MEDDLING WITH DANGER.
Winner of 16th Prize in RECREATION'S 6th Annual Photo Competition.
(See page 327.)

AMATEUR PHOTO BY WARREN S. SHAW.

WHO COULD BE CRUEL ENOUGH TO KILL ME?

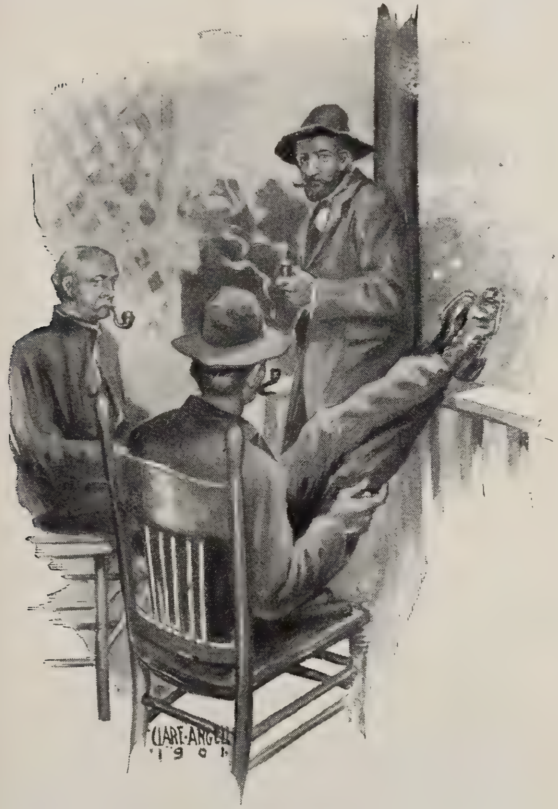
AN INCIDENT OF ANGLING.

J. T. HOPKINS.

"What manner of man he was his friends well knew; and even now, after years that he has been in hiding, their verdict, I am confident, would be in his favor."

"Then why should he remain under cover?" inquired Hobbs.

"Of that you shall presently know if you will be patient," continued the narrator. "In a comprehensive sense Jacob Zim came as near being a true man as nature and habit can produce. Besides, he was a gentleman. It is well to keep that in mind."



LET'S LEARN MORE OF HIM.

"Married, was he?" asked Dobbs.

"Yes, married, and, as he would often say himself, 'more's the pity.'"

"Since you're speakin' of Zim, let's learn more of him," urged Hobbs.

"That is easy and will not take long in the telling," said the speaker, as intermingling clouds of smoke from the pipes of the trio went floating toward the ceiling of the farmhouse porch whose balustered rail afforded restful support for the 3 sets of legs. "In the mind's eye I can see Jacob now as plainly as though he were of our company. That distressed, browbeaten look is still there, which the poor fellow always bore from the time when he took unto himself a wife; his rainy day setting in only too soon after that event, and proving a prolonged wet spell, with contrary winds, rough weather and cutting hail."

"Then it was hail Columbia he acquired with the woman, wasn't it?" interposed Dobbs.

"That may be admitted," returned the speaker; "and while I appreciate the feeble wit of your observation, I should prefer to be interrupted less frequently. It was doubtless pardonable in Zim to regard matrimony, as he had come to know it, as the bane of his existence; the great unhealing sore place in a life that should otherwise have been a healthy one. The harness was a misfit, and the pull was heavy on an upgrade whose summit was never reached. That kind of sorrowful case where incompatibility of temperament between man and wife makes trouble. They were a mismated couple. Eyes that were on them soon discovered evidences of discontent. Shortly after their honeymoon, when the ring had not long encircled the alabaster finger, a tiny fissure in their matrimonial experience became a gulf, which divided them. She, a giddy thing, spoiled and pampered, unduly concerned in herself and in those inconsiderate frivolities which most delight women, had no toleration for his well conceived ideas of what real pleasures are. It is to be regretted that the pair were too often at cross-points. The many profitless vanities of life were to her most alluring; whereas he, of a different mould and tougher fibre, sought true and more rational enjoyment in the pursuit of a profession which with him did not fall much short of worship."

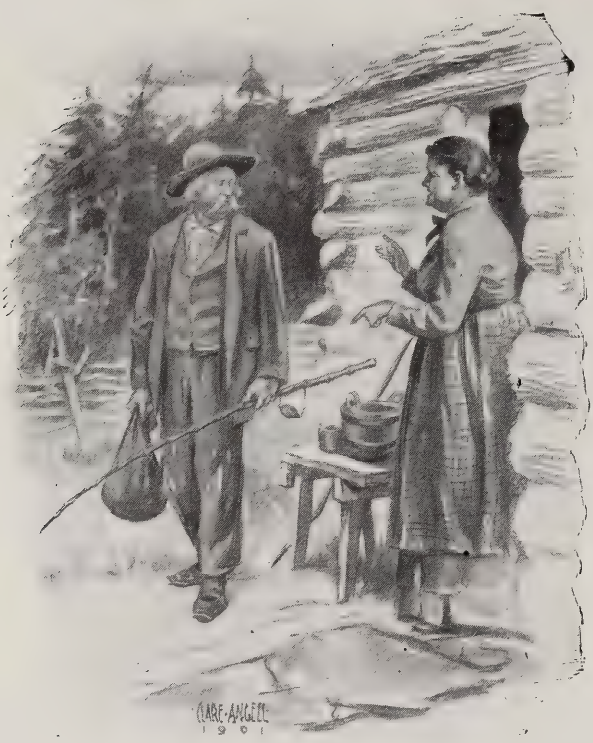
"Lawyer, was he?" queried Dobbs, becoming interested.

"I have an idea he was a doctor," speculated Hobbs.

"No, you are both wrong. Jacob Zim was an angler, and no better or more faithful ever tried a case at the bar of a 40-yard line. But, as I was saying, bad feeling was engendered between man and wife to remain and rankle. Unkind words were apt to slip the tongue, in which fault the woman was too often the aggressor. Do I tire you?"

"Not so much as our tramp of to-day did," answered the listeners.

"Jacob Zim was not brilliant, but he was



FRAU ZIM AGAIN UPBRAIDED HIM.

clever. Persistent and stubborn, enthusiastic, a good stayer and mixer, with fine sense and ripe judgment; a man who knew well that it is enjoyable and healthful to be out of doors when it is balmy, but prudent to go in when it rains. Yet, for all that, it was no uncommon thing for her to make light—nay, to make merry of his attainments; and one of her favorite remarks, which took the form of an accusation, was that he was not even capable of learning to boil water."

"I want to know!" exclaimed Dobbs.

"I will thank you to pass the tobacco," said Hobbs.

"Certainly; wasn't capable of learning, as if there should be any need of his trying to learn, when his mind was entirely preoccupied with matters more important. Versatile, as he was acknowledged to be, full of the love of his art, and quick in the solution of more intricate problems, he might easily have learned to boil water had he seen fit. But I come to his adventure.

"It was late in the afternoon of a September day, after Frau Zim had again upbraided him, that he went alone on foot to the brink of the river, the whirlpool of the Ohio, where that stream forms the Southern boundary of a tract of land granted to General George Rogers Clarke, whose rank and file induced the Indian to depart therefrom by the employment of tactics known to the soldier as the 'double quick.' It was not to fish that Jacob went on that stroll, but to ponder and forget. A small flatboat lay at the shore, one used in transporting workmen to and from the improvement of the channel at Wave Rock, a bad obstruction. Jacob boarded the flat and seated himself on the gunwale. He had not rested there long when he saw the outline of a fish near the surface of the water, which, in the twilight was not clearly made out as to variety, but was at least a 6-pounder, and Jake was spellbound.

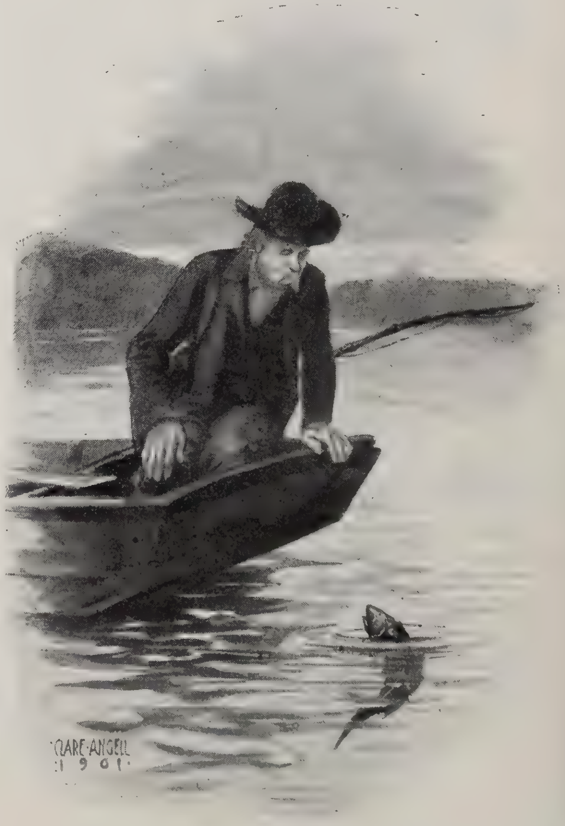
"In my porn days, alreatty, I haf never seen such a fine pass feesh like dot,'" said he.

"Whereupon the fish saw fit to correct him with the information that it wasn't a bass at all, but a German carp."

"Isn't Tom Pepper dead?" murmured Dobbs.

"The heavens weep, the sea moans, a tree will sigh; then why not a fish talk? I believe this story," confessed Hobbs.

"I thank you, gentlemen, for the faith you have in my veracity," observed the speaker, and he resumed: "Then Zim knew that indeed he had a sympathizing friend to whom he might reveal his woes. During their conversation Jacob felt that it was the first bit of real sympathy he had experienced in many a day. And so, employing German and English alternately, they talked on into the night, until the fish was forced by the lateness of the hour to



SIND SIE WEG VON IHREM WOHNORT?

hie away. As they were about to separate Jacob said,

"'Sind Sie weg von ihrem Wohnort; oder, im Fall sie keine Familie haben (und es weare vieleicht besser wenn sie keine haben) ist ihr Kosthaus nahe bei?'

"'Nein,' said the carp, 'gegenwaertig bin ich Wittwer. Ich streife herum wo es mir gefaellt aber meine Haupt mahlzeit nehme ich bei Butchertown eine kurze strecke oberhalb.'"

"Say, Johnson," said Dobbs, "can't you help us out with a translation of that lingo?"

"Well," explained the story teller, "Jacob asked the fish if he were far away from where he lived. In case he had no family, thinking it for the best if he had none, was the boarding house near, where he put up? To which the fish replied that he was a widower, browsing around almost anywhere, but taking his principal meals off Butchertown, a short distance up the river.

"As Jacob Zim trudged homeward he was overheard to say that he was glad he could neffer understant how to boil vater, and he would neffermore again in his lifetimes eat some boiled fish again alreatty."

"Where is your friend now?" inquired Hobbs.

"Well, that is my secret; but between ourselves, for *she* must not know, he wrote me from Cape Nome to say that while he was happier, and could kick gold out of the sands with the toe of his boot, yet he found women there, and he should have to move still farther away from that sex of civilization."

IN EXILE.

WARREN ADAMS.

In the eager world of fancy, which this moment seems so real
That sights and sounds of city fade and pale,
I can hear the blue grouse calling, I can hear the bull elk squeal;
I am weary, oh, so weary, for the trail!

Hear the creak of straining pack ropes; hear the patter of the hoofs,
Raising dust as chaff flies upward from the flail;
Feel the open heat of noonday; feel the cool of canvas roofs;
I am weary, oh, so weary, for the trail!

There are trout below the riffle, there are whitefish close beside,
And well I know the flies that most avail
To toll the great six-pounders from the depths where they abide.
I am weary, oh, so weary, for the trail!

See the level lines of sagebrush, smell its pleasant, bitter breath,
As it empties its aroma on the gale;
See the timid, saucy pronghorns—soon we'll flag them to their death.
I am weary, oh, so weary, for the trail!

Let me realize the fancy, let me make the dream come true
By the necromantic power of stage and rail;
Let me turn from humans Godward—it's the only thing to do
When a man has grown heart-weary for the trail.

A BEAR IN CAMP.

W. F. NICHOLS.

Some 3 miles Northeast of Steamboat Springs, Colo., there was, a few years ago, a beautiful body of pine timber, a famous resort for bear. In the spring of 1887 H. C. Monson and I having a contract to furnish the material and build a house in Steamboat, took our camp outfit, axes and guns, made our camp near a body of timber on a small tributary of Spring creek, and went to work chopping logs.

Our camp was within 8 or 10 feet of the little stream. There was no bank on that side, while on the opposite side was a perpendicular bank some 4 feet high, and then running up at an angle of about 35 degrees 75 or 80 yards farther on. While sitting in camp the first evening we saw, standing on the opposite side of the creek, a big buck. Monson seized his rifle and fired, striking the deer through the heart. In its dying struggles it rolled down the hill nearly to the bank of our little stream, leaving blood all the way. We dressed him and hung the meat on a small tree between our camp and the creek.

The following morning Monson got out before sunrise and went to the creek for a cup of water. He had stooped down, dipped up the water and begun to drink when he heard a growl, and on looking up saw on the bank above, looking down at him, about 10 feet away, a large black bear. It had found the bloody trail left by the deer, had followed it down to the bank, and was standing looking at the meat.

About that time I heard a coughing, strangling, choking sound out of which I made out "A bear in camp!" I sprang up like a jack in a box, and, although the air was cold and a heavy frost was on the ground I did not take time to dress, but caught up my rifle, threw a cartridge into the chamber and raised for a shot. By that time the bear had got away some 40 or 50 yards diagonally up the hill, and as he was disappearing in the low Sarvis bushes I fired. My bullet—a .40-60—struck him midway of the ham, passing through and lodging in the ribs.

Mr. Monson had all that time been industriously working at one of those detestable affairs, a canvas gun cover, in which he had his gun carefully buckled up, thereby losing a beautiful shot at about 50 feet. Having finally got his rifle out of the poke we bounded across the creek and ran to the top of the hill, but our game had given us the dodge. He was, however, killed a few days later by Mr. W. H. Dever, of Steamboat.

From the top of the hill we saw, about 200 yards to our left, a brown or hog bear coming directly toward us. We kept quiet until she came up within 75 yards of us, when we both fired. Mr. Monson's bullet hit her in the throat. Ranging back and downward, it passed through the ham and lodged under the skin, killing her instantly.

I drew Monson's attention to my airy costume, and although our hunt had not lasted more than 10 minutes I was thoroughly chilled. We adjourned to camp, where I dressed, while Monson prepared breakfast. After eating, we returned to the bear, disemboweled it, and took the trail of the big black fellow, which was easily followed by the blood.

We had gone about a mile when we came on 2 more brown bears, and got 4 or 5 shots at 150 yards. Thinking we had wounded one or both of them, we followed them a mile or 2, through rocks and fallen timber, when we lost the trail. Then we went back to camp and to chopping logs, disgusted with having killed but one bear out of 4 shot at, and all from short to mid-range.

Mr. Goops—Wasn't there some kind of a hitch about the wedding of Mr. Spooneigh and Miss Mooney?

Mr. Whoop—No; the groom did not show up, so there wasn't any hitch at all. —Baltimore American.

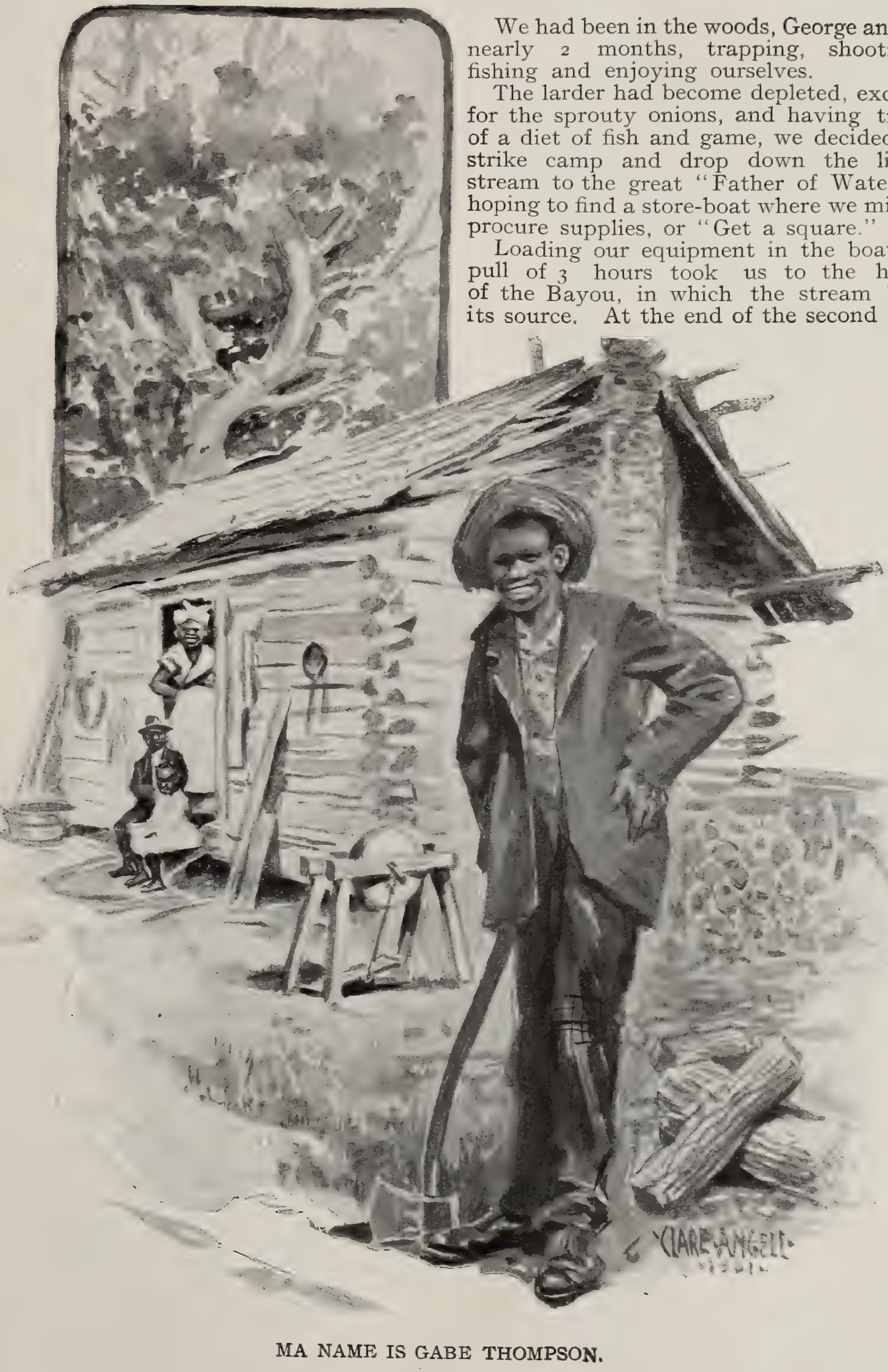
A SOUTHERN BEAR HUNT.

FRANK FARNER.

We had been in the woods, George and I, nearly 2 months, trapping, shooting, fishing and enjoying ourselves.

The larder had become depleted, except for the sprouty onions, and having tired of a diet of fish and game, we decided to strike camp and drop down the little stream to the great "Father of Waters," hoping to find a store-boat where we might procure supplies, or "Get a square."

Loading our equipment in the boat, a pull of 3 hours took us to the head of the Bayou, in which the stream had its source. At the end of the second day



MA NAME IS GABE THOMPSON.

we reached the Mississippi. George vowed he could smell biscuits less than 3 miles away, but we decided not to try to locate them in the dark, and were soon sitting by a blazing camp fire, enjoying a repast of wild duck, boiled, roasted and fried in catfish oil, with squirrel hash for dessert. In preparing the latter the onions were used. Then to a camp bed to be lulled to sleep by the night calls of woodland creatures.

The following morning we started early in search of those coveted biscuits and soon came to a settler's cabin, a typical log hut with outside chimney built of sticks and plastered with clay. In the yard, chopping, stood as black a man as I ever saw.

Having come upon him unawares, he was much startled at first, but soon recovering, stood a moment, ax in hand, scrutinizing us intently, then saluted us with a cheery, "Maw-nin, gem-men." We told him who we were, and not to be outdone in courtesy he said, "Mighty glad to see you-uns. Ma name is Gabe Thompson."

Then George asked if we could get a home-cooked meal; Gabe called "Clare!" and immediately there appeared at the doorway a perfect specimen of a colored "Mammy" followed by 4 children; the younger ones peeping at us from behind their mother's skirts.

Clare is worthy of passing notice. As she stood looking at us, after the usual "Maw-nin," I was impressed with her neat appearance. The homespun dress and apron were spotless, and the kinky hair was brushed back and held by a brightly colored kerchief tied in turban form. Her face beamed with good nature, though black and shiny.

When Clare learned our condition, with a woman's ready apology for "havin' nothin' fittin to eat," she "lowed she mote gib us suthin to stay us out till dinna, and den we'll hab a nice fat 'possum stuffed wid yams," and turning to Gabe she said, "Yo' kill an scall dat 'possum. We-uns done been feedin him long nuff." The fried salt pork and corn pone, with light white biscuits made of wheat flour, formed a breakfast to which we did ample justice.

After paying Clare "mos' too much faw sich a poo meal," we went out to Gabe, who had returned with the 'possum nicely cleaned and ready for the pan. We supplied him with a generous quantity of flat sweet store terbacker, and sat down on the wood pile to get better acquainted; as George cruelly remarked, to wait for dinner.

Gabe kept looking earnestly at my repeater. Noticing his deep interest, I showed him how it worked. He seemed lost in wonder, and remarked gravely,

"Dat is de lonesomes' gun I ever seen."

"How so, Gabe?" we asked.

"W'y jes' kase dey is no odder like it, an it nebber has no company."

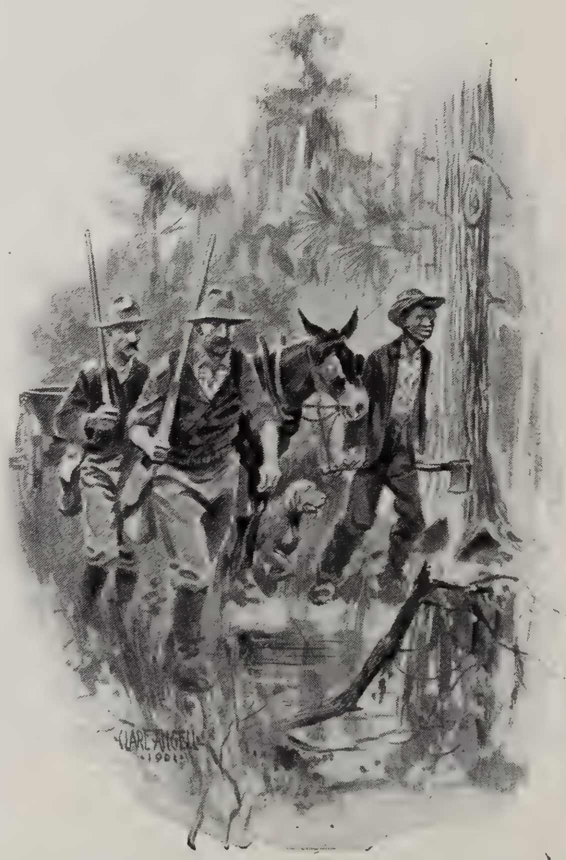
He went on to say, "Ef you-uns want to hab heaps o' fun, I'll took yous ober to de big swamp. Dey am lots o' bar dar, an' I'd like to listen to dat gun crack an hyah one ob dem pig stealers squeal!"

Gabe was cute, he laid his plans well and they were certain to succeed. We were interested at once.

"You say there are lots of bear? How far is it to the big swamp? How can we go there? Don't we need dogs?" and other like questions were propounded. He answered about as follows:

"Wa'l de big swamp am 'bout 14 miles from hyar, an I'll took yo' obber wif Rosie; an' faw dawgs, dat little 'fice' dar, wif Major to go 'long, is de bes' bar dawg roun' dese parts."

A look at the lazy appearing dogs was not promising. "Dat fice" may have had the least particle of terrier, shepherd, or spitz blood in him, in fact, any other kind of very ordinary dog blood; and he may have been a thoroughbred of some kind on which I am not posted. Gabe said he was a good bear dog, and Gabe was honest and ought to know. Major was much larger, tawny yellow, and very sleepy. After looking at him carefully, I decided that he was just dog, and "nigger" dog at that, but Gabe had said that as a consort



WE WERE GETTING TO LOWER GROUND.

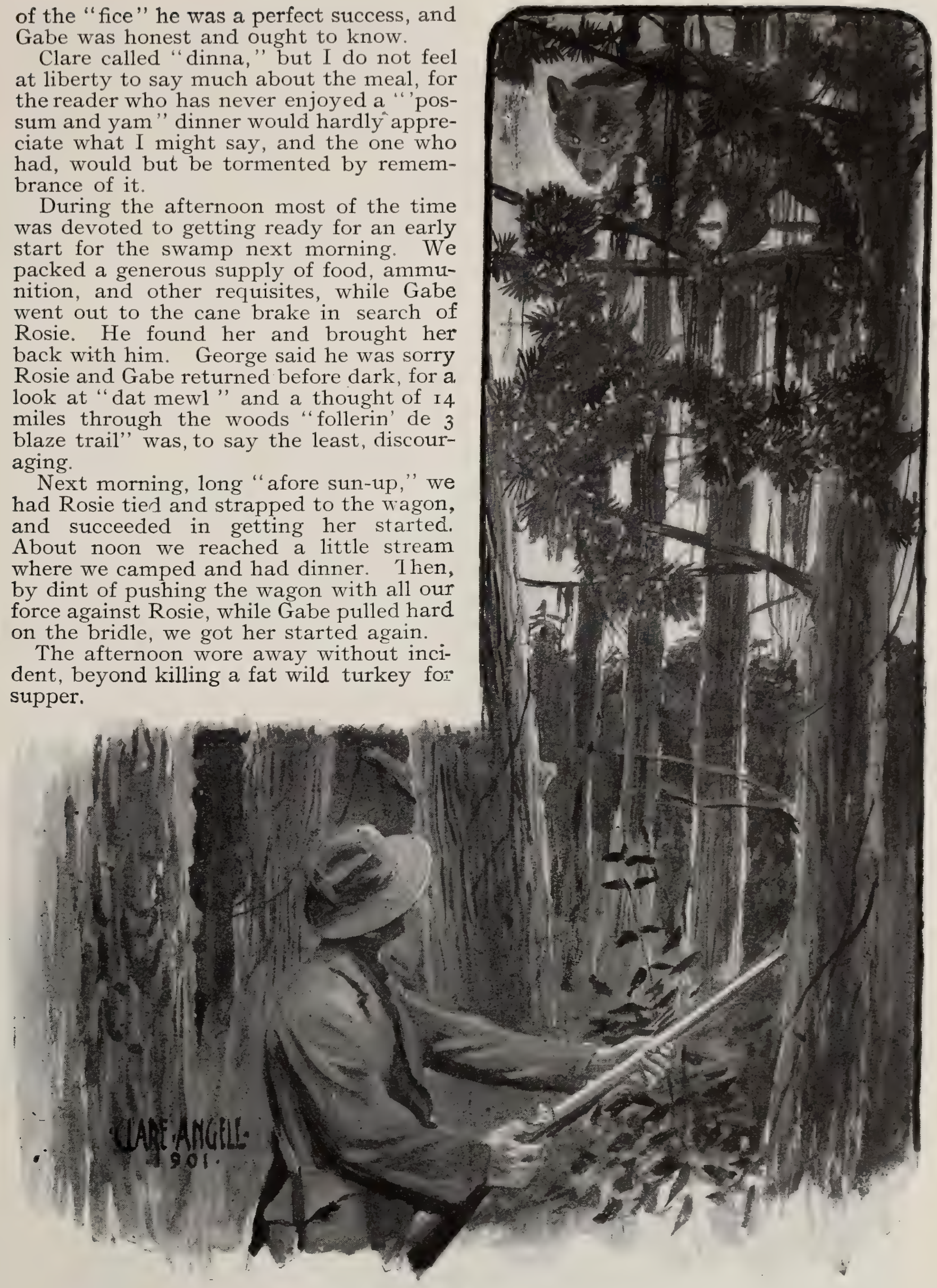
of the "fice" he was a perfect success, and Gabe was honest and ought to know.

Clare called "dinna," but I do not feel at liberty to say much about the meal, for the reader who has never enjoyed a "'possum and yam" dinner would hardly appreciate what I might say, and the one who had, would but be tormented by remembrance of it.

During the afternoon most of the time was devoted to getting ready for an early start for the swamp next morning. We packed a generous supply of food, ammunition, and other requisites, while Gabe went out to the cane brake in search of Rosie. He found her and brought her back with him. George said he was sorry Rosie and Gabe returned before dark, for a look at "dat mewl" and a thought of 14 miles through the woods "follerin' de 3 blaze trail" was, to say the least, discouraging.

Next morning, long "afore sun-up," we had Rosie tied and strapped to the wagon, and succeeded in getting her started. About noon we reached a little stream where we camped and had dinner. Then, by dint of pushing the wagon with all our force against Rosie, while Gabe pulled hard on the bridle, we got her started again.

The afternoon wore away without incident, beyond killing a fat wild turkey for supper.



I FOUND A HALF GROWN BEAR UP A SMALL TREE.

Night came and I asked Gabe if we were not near the swamp, but he had "nebber come dis heah way before, and didn't know zackly." We had traveled at least 20 miles in an air line, and not less than 30 counting detours around patches of cane, and other obstructions. We were tired and hungry, having walked the whole distance besides helping Rosie with her load at times. She was cursed with the proverbial mule disposition.

But when we had eaten our supper of turkey roasted in clay, we were perfectly contented, and would have been comfortable had we curbed our appetites. Next day was spent in the same way, in devious windings through the passes between trees. As the day wore away the timber became more dense, and there was a good deal of undergrowth, with here and there a giant cypress standing high upon its roots like a spider on its legs, indicating that we were getting to lower ground, and near the swamp. At nightfall Gabe said,

"Wal, we is right dar now, but de feller wat measured dem 14 miles must hab done it wif a coon skin an trowed in de tail."

We were soon sitting by a blazing fire, telling Gabe highly colored stories of camp life, planning our sortie into the swamp the following day, and wagering who would first succeed in killing a bear, when away off in the swamp we heard the angry bark of the dogs, followed by a perfect bedlam of yelps, both dogs barking as if fighting some animal. We were agreeably surprised that they showed such hunting qualities. As the sounds continued our faith in them rose, and when Gabe excitedly said, "Dats bah! I knows jes how dem dawgs talk," stock was at premium.

Grabbing our guns we plunged in the darkness into the swamp, guided by the sounds of conflict. Memory of that mile or more of travel, at one time in soft mud waist deep, next to be caught in the folds of a buckthorn vine that would only let go at the expense of patches of cuticle and swads of clothing, is certainly unpleasant. Yet we struggled on bravely as fast as possible, and slowly neared the scene of battle, still raging. As I anxiously peered through the darkness, down I went into a "lob-lolly" hole of unknown depth, from which I emerged just in time to hear Gabe say, "Lawd a'mighty! dats hogs."

My spirits fell, and I could not recover. We managed to get back to camp, and after scraping off some of the accumulated mud, lay down and were soon asleep.

In 4 days we were healed sufficiently to go home to Gabe's, which we did, starting early in the morning. As we journeyed monotonously along in the evening, the dogs pricked up their ears and with noses to the ground, set off trailing with loud yelps. I suggested following them, but George said he was "long on bacon," and declined. I went, determined to learn, if possible, what they had scented. They soon came to a stop, barking furiously. When I reached them imagine my surprise to find a half grown bear up a small gum tree. One shot brought him down, and I carried him back to the wagon.

As I sit in my den, his skin hanging on the wall pleads for Gabe, and I really think I have forgiven him.

AMATEUR PHOTO BY O. P. MOORE

COMRADES.

HUNTING IN MEXICO.

CHARLES WILMOT.

I left Cranford, N. J., December 26th, taking my .45-70, and an empty trunk, which I hoped to fill with trophies of the hunt. I arrived at El Paso, Texas, which is the stopping point for the game fields, the 5th of January. That day being Sunday, I went across the river into Mexico, to the city of Juarez, and there witnessed a bull fight, a brutal sport.

I was to take the Sierra Madre railroad the following morning for Casas Grandes, which is the last station on the line, but on my return to El Paso that night I found that my trunk containing my cartridges and my old suit of clothes, had not arrived. That taught me the importance of always making sure that my trunk is on the same train with me. Having to wait a day for my trunk, and being informed that I would have to secure a permit to take my gun into Mexico, I went over to Juarez Tuesday to arrange matters. That is when I had my first experience with the Mexican customs house. I could not make a single person understand what I wanted. Not one could speak English, and I can not speak Spanish. Here I thank Mr. Mead, of the Sierra Madre railroad, for his kindness in sending with me an interpreter. After I had waited 2 hours, told my name, where I was going, the number of my gun and had paid $5, they drew up a bond, on which they put $3.80 worth of stamps. It was then witnessed by 6 different persons and filed; after which I was given a permit entitling me to hunt 30 days. When going into Mexico pay the duty on your gun, which is assessed by weight, the cost being $1 a kilo, or 2 pounds. When you are through hunting, sell your gun; don't trouble to bring it back.

AMATEUR PHOTO BY CHAS. WILMOT.

THE HAUNTS OF THE MULE DEER.

Duty will be charged on all blankets and tents, unless they are soiled.

Wednesday morning I took the train for Casas Grandes, where I arrived at 5 P. M. After supper I secured horses for my trip to the mountains and at 8 o'clock the next morning I left Casas Grandes. I reached my destination, Colonia Juarez, by 1:30 in the afternoon. There I met Mr. A. Ivins, a thorough sportsman and a reader and admirer of RECREATION, who took me out for a hunt after mule deer. Mr. Ivins secured a large doe and broke the leg of a buck. We took the trail of the buck and followed him all the forenoon, Mr. Ivins finally securing him after a warm day's work.

The mountains around Colonia Juarez are steep, and the trails are extremely narrow and rough, making it hard to follow a deer even when he is wounded. Mountain lions abound, also bears. Back of Dry valley there are plenty of whitetail deer, but they are small, weighing only about 60 pounds. I secured 3 good heads, 2 bucks and a doe.

When my time was rapidly drawing to a close, I made tracks for Casas Grandes, leaving there Saturday morning for Juarez. While getting off the train with my deer heads, I met a genuine game hog. He stepped up to me and asked me if that was all the game I had. On my saying yes, he said that the year previous he, together with 6 others of his kind, had killed 213 antelopes! He an American, too!

I am now having my heads mounted, and I hope to some day take another trip in that country when I have more leisure.

AMATEUR PHOTO BY MRS. E. E. LAWRENCE.

WILD GEESE.

Winner of 23d Prize in RECREATION'S 6th Annual Photo Competition.

SEEING THE OLD CENTURY OUT.

SIDNEY M. LOGAN.

Far up in one of the box canyons of the Kootenai range, curled up on a couch of fir poles, wrapped in a pair of California blankets, lulled by the sonorous blasts of a Rocky Mountain storm and the yelp of a coyote as it circled around the carcass of a big buck not far distant, Chris and I saw the old century out; and, in the language of Bret Harte, "it happened this wise":

In Flathead valley and the surrounding mountains the fall and early winter of 1900 held but poor promise to the anxious sportsman. Rapidly the December days flitted past, but it seemed that the snowfall so necessary to a successful deer hunt would never make its appearance. The 25th was ushered in, and with the exception of a few scattering flakes of snow it proved to be a green Christmas. All that time the close season, it seemed to at least 2 individuals, was approaching with indecent haste. January 1st would be the last day on which it would be lawful "to shoot or otherwise kill" the mowich, whether of the whitetail or mule deer species. Long ago the Major and I had talked matters over and had decided that Wolf creek, many miles to the Westward, far up in the Kootenais, should be the spot to respond to the crack of our respective .38-55's smokeless, and witness the downfall of countless antlered denizens of that section where everything stands up edgewise.

On the 27th, after a protracted powwow, we decided to start that night for our chosen hunting ground, notwithstanding reports that the snow had not yet driven the deer down from the high mountain peaks, and that the ground where we proposed to hunt was absolutely bare. Then followed perhaps the most pleasurable part of a grand deer hunt; the gathering together of camp paraphernalia. When that was complete we started for the Kootenais, about 65 miles distant.

Some time in the night we reached our destination. As the vestibule doors of our train were thrown open, we found that a blizzard was on in full force. The train came to a stop, and a few rapid kicks served to deposit camp outfit and bedding in the snow. We quickly followed in the wake of the bedding. We had scarcely time to recover our footing on the slippery grade before the red and green lights of the rear car were flashing out of sight around a curve while we, by the dim light of a borrowed railroad lantern, gazed first at our pile of luggage and then at the blank and slippery sides of the cut in which we found ourselves.

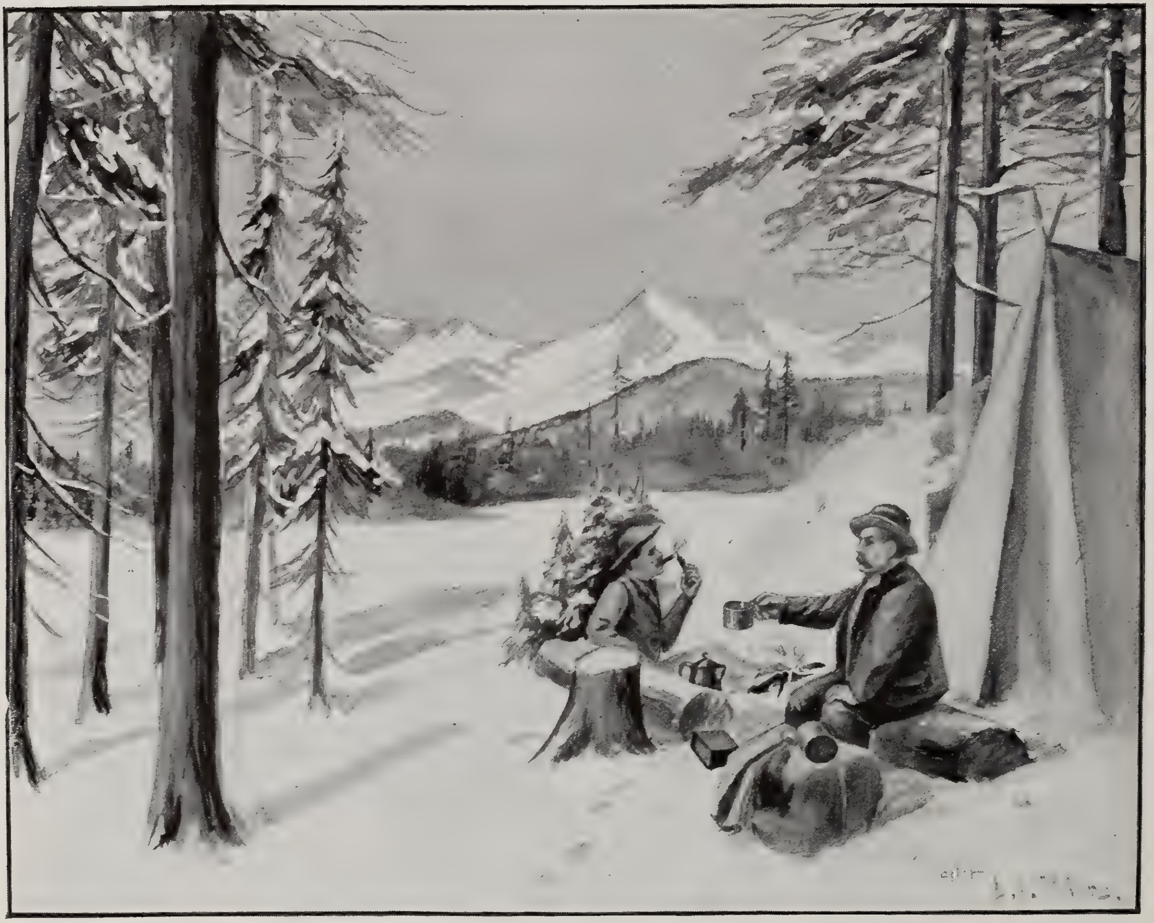
I started to hustle up the side of the cut, but the coating of fresh snow slipped beneath my feet and before I had fairly started up the incline I was deposited in the ditch beside the camp outfit. Again and again I tried to climb the frozen sides of the cut, but as often I took an involuntary toboggan slide into the ditch before I had gone halfway up the slippery incline. Finally we reached a fairly level tract of ground. There we built a fire, after a struggle of 30 minutes with wind and wet wood. The Major then fished out of his grip several sandwiches that he had carried in case of emergency. He said that particular brand of cheese came from Denmark, and I became satisfied I had probed the mystery of Ophelia's despondency and Hamlet's melancholy. By the time we had finished supper it was 2:30 A. M., so, unfolding our cots and spreading our blankets there in the pelting snowstorm, we betook ourselves to rest.

With the first peep of day we were both astir, and after a hurried breakfast of bacon, coffee and bread, we undertook to find a location for a permanent camp. Snow had fallen during the entire night, and was still falling; but the wind had subsided. Beds and camp outfit were covered with snow, but the temperature had moderated, and neither of us felt any disagreeable effects from our outdoor sleep.

The spot where we had dropped was midway between the stations of Sterling and Fisher River. Although almost the entire landscape was hidden behind a curtain of falling snow, we could see that we were in a deep canyon many miles in length, running East and West. Down this canyon, and on the opposite side of the railroad track from the spot where we had passed the night, noisily rattled the little stream known as Wolf creek, overhung with intermingled branches of willow, birch and evergreens. From each side of the stream, gashed and furrowed fragments of the great Kootenai range rose high up into impenetrable clouds of whirling, eddying, dancing, scurrying snow. Dim as the outlines were, the landscape was beautiful and stirring.

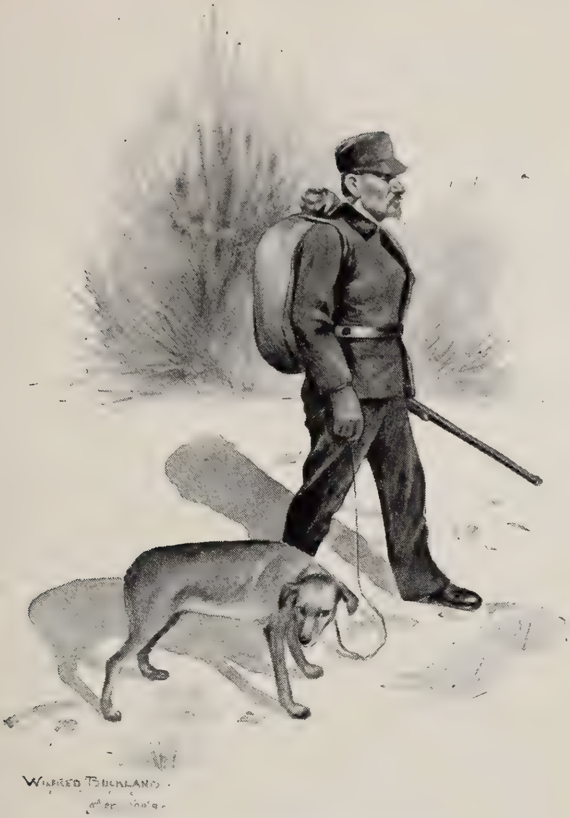
Within half a mile from the spot where we had passed the previous night we found an ideal camping ground; a level park-like tract, perhaps 40 acres in extent, covered with fallen pine, fir and tamarac trees, dry and hard. On one corner of the tract stood a thicket of young evergreens and near by there gushed from the ground a stream of clear, sweet, vitalizing water. We built a blazing fire, pitched our tent, spread our cots, cut fir boughs, threw them on the floor of the tent and on the cots and we were ready to cook and eat dinner. This consisted of biscuits, fried veal and bacon, baked beans in tomato sauce and last, but not least, a mince pie which had been snugly tucked away in the outfit and came out as fresh and crisp as if it had been quietly reposing on a shelf all the time.

After dinner we started in search of deer, but, although it was dark when we turned our steps toward camp, we did not see even a cold track. The soft, fluffy snow on hillside and ravine was undisturbed save by the occasional track of a coyote or lynx. We consoled ourselves by assuring each other that if the snow continued to fall during the night, there would be good hunting on the morrow. The weather was so soft and warm when we curled up in our blankets that we let the fire die down; but long before daylight the temperature dropped to 10 degrees below zero, and we were glad when morning came.



DINING OUT.

As the sun made its appearance for the first time in 36 hours, it was reflected back from a deep coat of fluffy snow that covered hillside and valley, and gave promise of royal sport among the mowich. The Major shouldered his gun and started down the creek, while I struck across the narrow bottom in the direction of a towering mountain whose base lay along the opposite bank of Wolf creek. For an hour I wandered over side hills and gulches until, hearing the sound of a shot near camp, it occurred to me that possibly the Major had killed a deer and was in need of assistance. The prospect of finding deer where I then was did not look bright, so I headed toward camp. As I came out to the railroad track I met a man, followed by a little black and tan dog. The stranger was dressed in blue overalls, German socks, rubber overshoes and a brown duck coat. His face was covered with a scanty growth of red whiskers; across his arm rested an up-to-date .30-40 Winchester carbine; and over his back was slung a knapsack improvised from a piece of burlap and containing his camp outfit. The black and tan pup wore a coat of hair that in a tropical climate would probably have afforded sufficient warmth to keep his little body from chilling, but as he stood on that bleak and exposed railroad grade



CHRIS AND HIS PARTNER.

that crisp morning, doubled up like a jackknife, his tail between his legs, and a discouraged look on his intelligent face, I was reminded of the cowboy artist's cow waiting for a chinook.

The stranger told me he had started 4 deer, but had failed to score. He it was who had fired the shot I had heard from the other side of the creek, and I breathed a sigh of relief when I found that for awhile, at least, I was spared the Major's vaporings concerning his prowess, while I was empty handed. I soon learned that the name of my new acquaintance was Chris; that he was running the Melbourne section house; and that he was out in quest of venison for his 6 little ones. He also informed me that he hailed from Denmark. I invited him to make one of our party and we returned to camp.

Arriving at the tent the stranger relieved himself of his pack and the shivering pup took possession of my bed. After a short consultation we picked up our rifles and started anew in quest of game. On the North side of camp the mountain ran boldly toward the clouds, and was almost bare of timber. A heavy growth of bunch-grass covered its South side and this grass, filled with frost and covered with snow, made the footing uncertain. Notwithstanding the apparent difficulties we enthusiastically set to work to scale its slippery sides. This was almost painful, and time and again it became necessary to clutch the bunches of grass to keep from sliding down the side of some ravine. The butt of the gun was in constant requisition as a brace against falling, and it required hours of almost constant climbing to reach a point where even a few fresh deer tracks could be seen. Shortly after starting, Chris and I had separated and after 2 hours of hard climbing I came to the conclusion that I should not see him again until I had reached camp. I was soon to learn, however, that he was but a short distance above me. I had just stepped on to a level bench on the mountain side, after a particularly laborious climb of 20 minutes, when I saw a whitetail fawn standing broadside toward me, in bold relief, its ears outspread and its head turned toward me, but as motionless as a rock. Now, the vital part of a fawn's body can almost be covered by a man's hand. It is a small mark; and that deer was 200 yards away. I had no desire to leave a wounded deer on the mountain side, and had still less desire to follow one up and down, across ravines and ridges. I stepped behind a tree and tried to figure out some scheme to get nearer my venison. Had it been an older animal, my quick movement would have been the signal for Mr. Deer to fly up the mountain side or into some ravine; but fawns have more or less curiosity, and I reasoned that it would stand there until it found out who and what I was. Between the tree behind which I was standing and the fawn, stood another tree about 25 yards distant, and in line with the fawn. I moved quietly toward the latter tree. As I reached it I cautiously stuck out my head and ascertained that my quarry had not moved. He was still standing upwards of 175 yards away; but as I saw no chance of getting closer, I rested my rifle against the side of the tree, took careful aim and fired. As the sound of the shot echoed through the surrounding canyons there was a defiant flutter of a white flag, and the fawn disappeared, unharmed, over the brink of a friendly ravine. I ran quickly toward the ravine with the hope of securing another shot, when I heard the voice of Chris yelling,

"Look out! There come 4 more."

I glanced up the mountain side, but before I could bring my gun to my shoulder, the last of 4 white flags was disappearing over the brink of the same ravine that so effectually sheltered the masterly retreat of the fawn. I heard what appeared to be a few emphatic remarks coming from the side of the mountain farther up, but as they were in the Danish language, I felt justified in ignoring them; so I painfully resumed my climb, determined to reach the top of that mountain or stay out all night. A little later, as I was toiling up the mountain whose summit seemed to be receding rather than approaching, I descried the form of Chris coming toward me at a 2:40 gait, slipping, sliding, jumping and tumbling down the mountain side.

"Did you see him?" he questioned, as he came within speaking distance.

"See whom?"

"The deer I wounded."

I informed him that no wounded deer had crossed my track, and he explained to me that shortly after the 4 whitetails had made their escape into the ravine he had jumped 5 mule deer and had fired 2 shots at them. Although he was within a few hundred yards of me when he fired the shots, I had not heard the sound of his .30-40. The deer had started toward the summit and he had followed as quickly as it was possible for him to make his way up the mountain. Arriving at the summit he found that the tracks made by the fleeing mowich indicated that only 4 had passed over. He concluded that he had wounded one, but that in his excitement he had imagined he saw all 5 start up the mountain; hence he was on his way back to the place where he had first started them, with a view to picking up the trail of the wounded deer. Together we returned to what we supposed was the objective neighborhood, but a diligent search failed to disclose any sign of the missing deer; and as for blood stains, the snow was as pure and white as at the hour it had fallen.

Resuming our tramp up the mountain, we reached the summit a little before dark, and resting our tired bones on a fallen log, with a giant fir as a back to the seat, we feasted our eyes on the scene of beauty spread out below and around us. The sun, hidden behind the sharp peaks of the most distant range within view, threw its coruscations and scintillations of cold white light far up into the Western sky, and they were reflected back from the snow-capped masses of rock that seemed to tower away above timber line. Closer at hand, but far below us, ran seamed and ragged gulches whose sides were decorated with snow-encrusted foliage of pine and fir, intermingled with the ghastly, needle-shorn limbs of the tamarac. To the North lay the great gorge through which the mighty Kootenai found an outlet from its icy source far up in the British possessions to the sunny waters of the Pacific. Off to the South and West could be seen 12 deep, wooded canyons converging, indicating the place where the Fisher and West Fisher join forces. Far in every direction stretched the foliage-skirted and rock-capped mountains. From the head waters of the Swift Current and MacDonald lake, which take their rise on the summit of the main range of the Rocky mountains, 200 miles to the Eastward, to the confluence of the Kootenai and the turbulent Yakt, almost 100 miles to the Westward; from the Tobacco and Elk rivers on the North to Flathead lake and Swan river on the South was one vast stretch of mountain and woodland, dotted by lakes and threaded by hundreds of crystal streams. In almost the centre of this vast stretch of mountain woodland, often spoken of as a dimple in the cheek of nature, nestles the little valley of the Flathead, with its city of 3,000 busy, restless, ambitious inhabitants.

What section in all this broad land could furnish the hunter with such numbers and varieties of game? The South Fork with its elk and whitetail deer; the North Fork and MacDonald lake with their moose, goats, sheep and deer; the Yakt, the Fisher, the Stillwater and the Kootenai with their quota of caribou, sheep, whitetail and mule deer; to say nothing of the wild fowl, the bear and the mountain lion, that curse of all game countries, particularly the locality in which I found myself on the evening of December 30th, 1900. Yet how prodigal and reckless of all this game have been the inhabitants of this section.

Ten years ago these canyons did not echo to the whistle of the locomotive. A single tote road threaded its way through these passes from the summit to the Idaho line. Then came the building of a railroad. With the approach of winter thousands of deer came down from the high ranges until the woods swarmed with white flags and the antlers of giant mule deer. Then did the idle railroad laborer, the engineer, the camp follower and the hanger-on sally forth with all kinds of fire arms; then did gulch and crag re-echo hourly the crack of murderous rifles; then did the poor, bewildered creatures, seeking refuge from the inhospitable fastnesses above, fall by hundreds and thousands. To what purpose? To feed the hungry mouths of men, women and children, or even dogs? No! simply to satisfy man's ungovernable desire to kill, to slaughter, to "see them fall." All through the winter months, covered by a white mantle of snow, thousands of carcasses were strewn along the line of the railway, to fester and rot when the summer sun made its appearance. Yea! verily, in the case of railroad construction, man's enterprise and progress exacted a bloody tribute from the gentle creatures which inhabited the Kootenais.

Such is the story of the great county of Flathead. For years past deer have been mercilessly slaughtered in all sections of that county to gratify the morbid whim of would-be sportsmen, and to fill the pockets of hide and market hunters. Yet there has been no awakening on the part of its officers or inhabitants to the gravity of the crime. The killing of deer out of season and in excess of the number permitted by law has been not only condoned but justified by the officers entrusted with the enforcement of the law. In this, such officers have been upheld by an unhealthy, unreasoning public sentiment. Now and then there comes a protest from some person who can see that the destruction of the game will deprive Flathead county of one of its greatest attractions, viewed from the standpoint of business or pleasure; but the demand for reform in this respect has been as a voice in the wilderness, or a cry for help on a storm-tossed sea. Members of the League of American Sportsmen have been warned that it would be better for their business if they would take less interest in the enforcement of the game laws; and newspapers have been known to urge an avowed determination of a candidate to enforce such laws as a reason for defeating him at the polls.

But there is yet hope. Education and time will work changes in public sentiment and the market hunter and the wanton destroyer of game will be dethroned.

The darkness was fast gathering around the top of the chilly old mountain when Chris suggested that we stroll toward camp. That spot was 3 miles away. We were soon going down a long incline directly toward camp, but the going was almost as difficult as the climbing we had experienced earlier in the day. The monotony of the constant slipping and stumbling and wild swinging of arms to maintain our balance was broken by an occasional fall that threatened to place one or the other of us temporarily on the retired list. Long before we reached camp we could catch occasional gleams from the camp fire far below us, and after we were once cheered by that sight the walking did not seem half so bad. When we arrived at camp the black and tan pup which had quietly followed at the heels of his master all day, again took possession of my couch, and by way of introduction I said,

"Major, here is a countryman of the late lamented Hamlet. Mr. Chris, this is the Major."

I felt that I ought to make known Chris' nationality, and I found, a few minutes later, as I was returning from the spring, whither I had gone for a bucket of water, that my judgment was right, for I heard the Major, in tones that proved his openhanded hospitality and generosity, say,

"Chris, here is some cheese that is hot stuff. It was made in your country, and as the rest of us can get all we want when we go back to town, I want you to eat all of this."

The next morning the Major was not feeling well, and decided he would take the evening train home. Chris and I decided to remain until the end of the season.

After breakfast Chris and I started for a high peak beyond any we had reached the previous day. We made but slow progress through the snow, which was more than knee-deep. Near the top of the peak all signs of deer had disappeared and, save by numerous marten tracks, the snow was undisturbed. It began to look as if we had had our climb for nothing. As we reached the top, however, we experienced a few moments of intense excitement. The snow was cut with fresh tracks, and the buck brush was mutilated and pawed in a way that indicated several large bucks had recently been feeding there.

We had taken but a few steps, when the little carbine Chris was carrying flew to his shoulder and through the partial screen of buck brush I saw that he was drawing a bead on as fine a buck as ever reared its lordly head on that old mountain. The buck was a corker and, as he stood there, his head thrown back, his nostrils inflated, sniffing the air, uncertain whether danger threatened or not, I knew that a metal patched bullet projected by 40 grains of high pressure nitro powder would soon end his career. Slowly the muzzle of the carbine in the hands of the steady nerved Dane was elevated, steadily it poised a second and then followed the quick, sharp crack peculiar to smokeless powder. There was a mad plunge forward, and that grand old monarch of the mountains went to his knees, but in an instant he was on his feet again and plunged madly down the mountain side.

Then commenced a wild scramble, up hill and down, the buck in the lead, the Dane a good second. Five times did that little carbine speak and 5 metal patched bullets passed through the body of the buck, each apparently in a vital place, before the old fellow surrendered. During the scramble I lost all track of the participants and was pursuing my way along the ridge when I finally received a hail from Chris, who was in the bottom of the canyon trying to snake the deer along by the horns. With difficulty I made my way down to where he was and relieved him of his carbine while he continued to drag the buck toward camp. Arriving in the vicinity of a deserted cabin, we concluded that as darkness was rapidly coming on we would leave the deer on the trail and proceed to camp. Coyotes were numerous in the neighborhood, and as a sort of scarecrow to keep them away from the deer, I spread a handkerchief over the carcass and left it for the night.

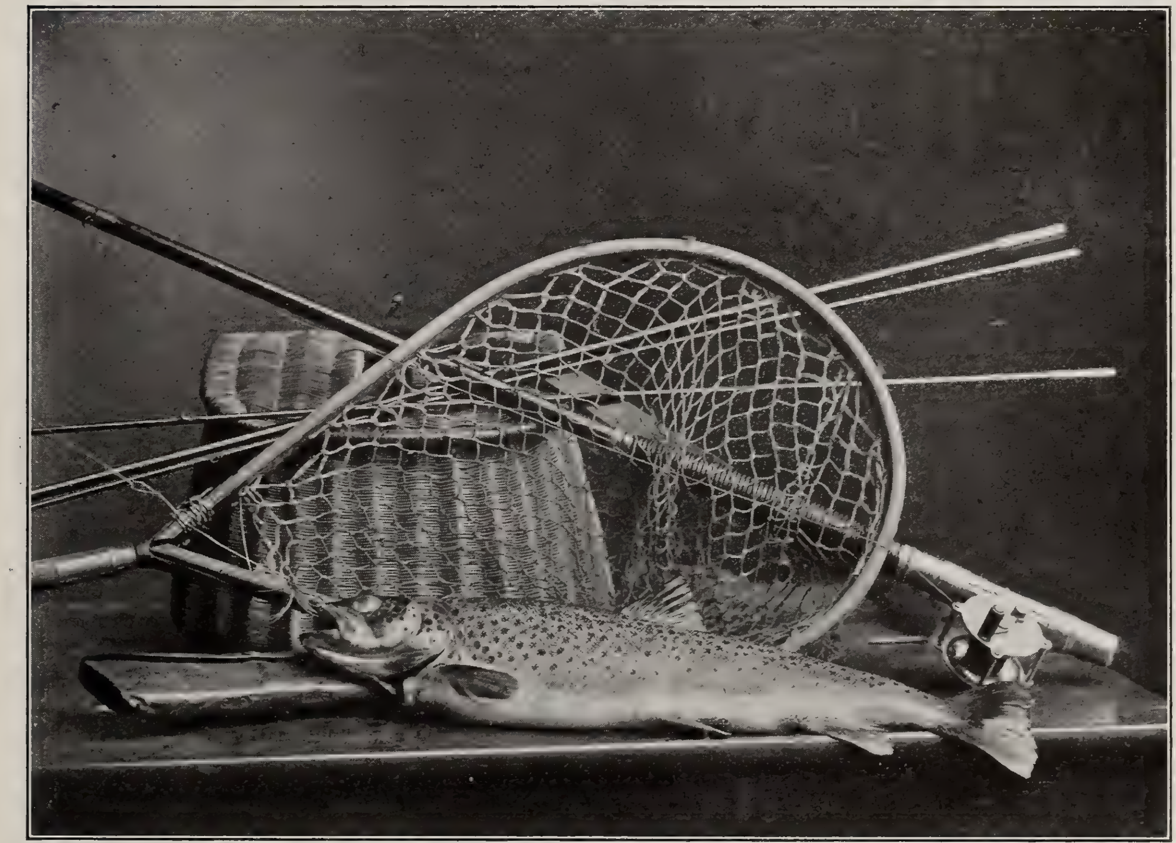
After supper, as Chris puffed at his pipe and I was enjoying one of my few remaining cigars, we discussed ways and means of circumventing the foxy mowich on the morrow, the last day of the season. I finally suggested that we take a pair of blankets each, and enough food for breakfast go up the canyon and pass the night in the deserted cabin. We would then be in the locality where deer signs were the most numerous and would not have to travel so far in the morning to reach our hunting ground. We were both tired and the plan was not an inviting one; but as we had only one more day in which to hunt, it was advisable to make the most of it. Accordingly, about 8 o'clock, we rolled up a pair of blankets apiece, put some provisions in Chris's knapsack, and started for the cabin. It was about a mile from our camp, and the trail leading to it, even in daylight, was a hard one, but in the dark we were constantly slipping and falling.

Arriving at the cabin, we soon had a cheerful fire burning in the fireplace, which was half furnace, half stove, improvised from a few cobblestones, the top of a caboose stove, and a few rusty joints of pipe. After the chill had been removed from the cabin, we lost no time in rolling up in our blankets. In the cabin were 2 bedsteads, made of rough pieces of timber and covered with round poles. I was soon curled up in one of these while Chris, with many comments adverse and otherwise, but all good natured, spread his gray blanket on the other. The wind whistling around the corners of the cabin and through the branches of the trees outside lulled me to unconsciousness, and when the old year and the old century took their departure, they saw 2 weary hunters up there in that box canyon sleeping as soundly and sweetly as the babes in the woods, unconscious of the fact that the most wonderful of all the centuries was passing forever into the domain of history.

Our search for deer the following day proved fruitless. In the afternoon we wearily returned to the cabin, rolled up our blankets and returned to camp, picking up the carcass of the blacktail buck *en route*. Arriving at camp, we prepared a hasty dinner and packed our outfit. We were 4 miles from Atlanta, and it was necessary to get our outfit to that station in order to get it aboard the train, as the engineers refused to be flagged when going East. The problem of how to get a buck weighing 200 pounds, and as many pounds more of camp outfit, to the section house was a serious one. It was decided that Chris should "snake" the deer while I was to improvise a toboggan from a wagon sheet and perform the same service for the camp outfit. It was a primitive means of transportation and I was constantly stopping to pick up parts of the camp outfit, owing to the frequent overturnings of my awkward and refractory conveyance. After we had pulled and tugged at our loads until we were both ready to "sit down and cry" we discovered an old hand sleigh, which some trapper or prospector had abandoned. As we placed the old sleigh between the rails and loaded the outfit on it we thought our troubles were at an end; but notwithstanding the fact that Chris pulled liked a horse, and I pushed with might and main, the clumsy conveyance moved but slowly and painfully. The willow runners cut through the soft snow and clung to the cinder covered cross-ties with a loving embrace. Every 20 feet or so we were compelled to stop and catch our breath. After we had gone perhaps half a mile in that way Chris pulled the deer off the sleigh while I harnessed myself to the latter and pulled and tugged for dear life. We had managed to cover perhaps a third of the way and had given up all hope of reaching the station before the East bound passenger train when in the darkness behind me I heard a voice saying,

THE OLD BUCK'S HEAD.

"Come, lads, get that thing out of my way," and I saw the hand car of the section foreman, manned by that individual and half a dozen Japs. I recognized him as an old acquaintance, and persuaded him to take the outfit on his hand car, to the station. Chris and I then loaded the carcass of the buck on the sleigh, and pushed and pulled for an hour, but could make little headway. The infernal runners seemed to have an affinity for cinders with which the road was ballasted, and with dogged determination they refused to move except when the utmost force was used to compel them forward. Finally, casting the sleigh into the ditch, we snaked the buck along by the horns until I was moved by a happy inspiration, and suggested to the husky Dane that if he would cut off the buck's head close to the shoulders, I would carry the head and both rifles and he could carry the rest of the carcass. After kicking himself for not thinking of this sooner, Chris produced his jackknife and performed the necessary amputation. While this was going on Number 4 whizzed past us and we knew that we would have to spend the following day at Sterling section house unless we were lucky enough to catch an East bound train. It was after 8 o'clock when we reached the station and stored our outfit in the pump house so as to be able to catch any East bound train that might stop there for water; but no train passed that night and we were compelled to pass the following day in and about the section house. Toward evening Number 4 stopped at the water tank, we threw our outfit into the baggage car, and I made a rush for the diner to procure and enjoy a smoke, the pleasures of which I had been denied for 24 hours. As the train slowed up at Melbourne I bade good-by to my jovial companion, the Dane, after a mutual pledge that if circumstances permitted, we would meet again the next fall, and together chase the festive mowich.

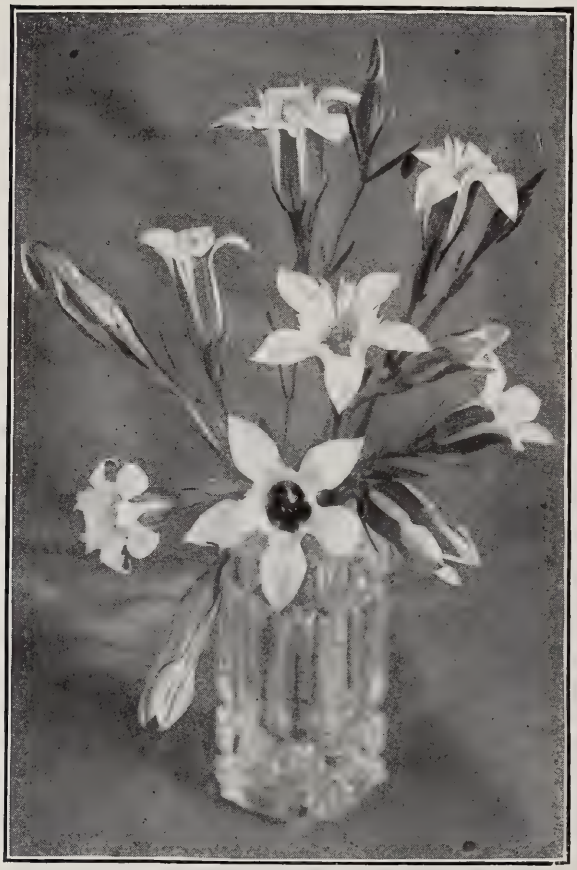


AMATEUR PHOTO BY E. D. HESS.

BROWN TROUT.
Winner of 18th Prize in RECREATION'S 6th Annual Photo Competition.
Made with Premo Camera.

GENTIANA AUGUSTIFOLIA IN FLORIDA.

It would seem strange to a flower lover of the North, who does not see a wild flower in bloom in the barren Northern woods from October to April, to step out here some day in mid-winter and find blooming at his feet one of the most beautiful and delicate flowers imaginable. Yet, here in Western Florida, where most vegetation is killed early in November, and where the mercury sometimes registers as low as zero, these little gems blossom from November to March.



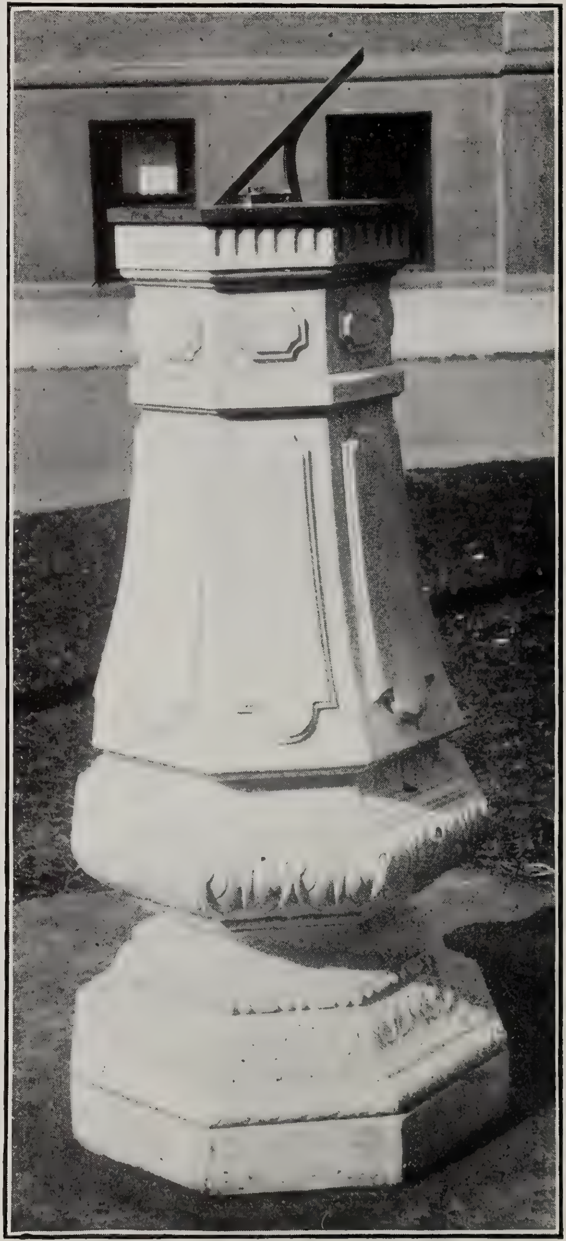
MID-WINTER BLOSSOMS.

This flower is, as its names implies, narrow leaved and slender stalked, not being able to support, upright, the single flower, without the aid of the grass through which it rises. Gray's Manual recognizes 2 colors of this variety, one azure blue, and one greenish and white variety; while one form has pure white lobes. The throat is greenish and the exterior tube is a peculiar shade of dull greenish purple, that at a distance looks blackish.

The home of our winter gentian is the low,moist, open ground bordering streams, usually in heavy grass. Its height is a few inches to a foot or more. The flowers are about 2 inches long, and are sensitive to heat and light, opening each bright, warm day, and remaining closed for days at a time in cold, bad weather. I have found gentians blooming on bright days following almost zero weather. This peculiarity renders them difficult to photograph, for they begin to close in a few minutes after removing them from the warm sunshine. Changing them from a warm temperature to a cooler often wilts them. Two of the buds in the illustration closed during operations and most of the flowers were getting limp. Gentian plants are perennial, and extend abundantly from New Jersey to Florida in one form or another.

C. E. Pleas, Chipley, Fla.

AN INTERESTING RELIC.



Sun Dial Presented to Yale University, by E. A. Caswell. Base from Stewart Mansion. Dial made by Gall & Lembke, New York.

SELF-DEFENSE WITH THE REVOLVER.

JACK PATTERN.

The first requirement is a suitable weapon. If it is to be concealed, a .32 or .38 double action revolver, with 3 or 3½ inch barrel, is most desirable. A hammerless revolver or one with the thumb piece sawed off, is the best for the pocket, as there is nothing to catch when drawing it. On the other hand, a hammer revolver is better for deliberate shooting, because it may be used as a single action. With a little care, however, the trigger of a hammerless may be held back to such an extent while aiming that it will take only a slight squeeze to discharge the revolver. In a country where it is not necessary to conceal a revolver, a .44 W. C. F., or a .44 Russian with 5½ or 6 inch barrel, is the best arm. A Remington double Derringer may be carried comfortably in the vest pocket, and is effective at close range.

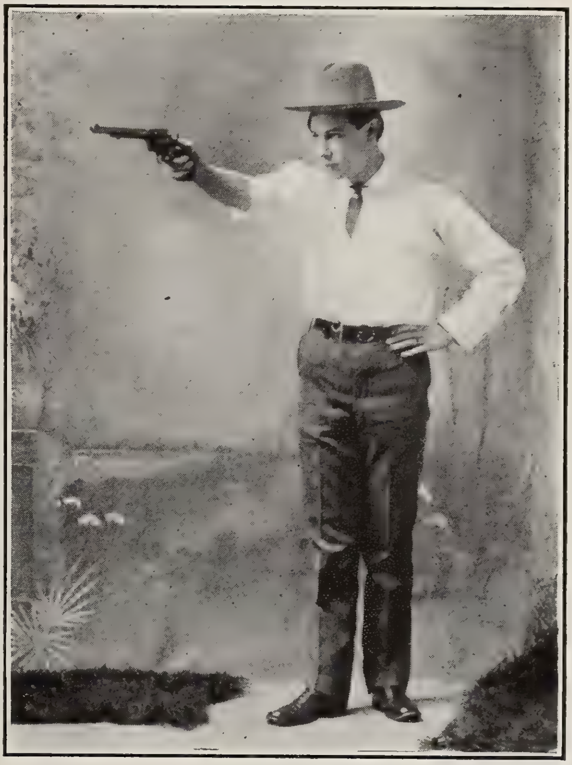
The next consideration is the right ammunition. For the pocket revolver any black powder factory-loaded, .32 or .38 cartridges are all right, but I like U. M. C. smokeless cartridges, with the special self-lubricating bullet, better than any others. For the large revolver, factory-loaded cartridges are also best. My favorite is the U. M. C. .44 Russian smokeless, with above mentioned bullet. One of the best cartridges I have ever used is a .44 W. C. F. charged with 11 grains Laflin & Rand sporting rifle smokeless, and an Ideal express bullet. It is not only accurate, but will tear terribly. I have tried slightly hollowing the points of bullets of various calibers with excellent results.

Carrying the revolver with safety, and so it may be easily drawn is the most important problem of all. The hip pocket offers one of the best places of concealment, but is not so handy as the side pocket of the coat, from which it is possible to shoot without drawing the weapon, thereby taking an enemy completely by surprise. For the large revolver, an ordinary holster without flap, fastened on the hip from a belt, is the best method. If the revolver does not have a rebounding hammer, always lift the hammer to the safety catch; not half-cock, as some do. Never let the hammer rest on the cartridge, as it may be exploded by a slight blow, and in all probability would be by a fall.

If it is necessary to shoot at all, get the first shot if possible. This may not seem highly original, for writers on the subject have said the same thing since gunpowder was invented; but it can not be repeated too often. Get the drop on your man and hold him quiet, but do not let him come too near, as he may use one of the tricks which I shall describe later; and do not take your eyes off from him.

Anyone should, with a large, accurate revolver, after a reasonable amount of practice, be able to hit a man in the body at 50 yards with quickness and precision; but shooting in self-defense is usually at distances not exceeding 25 feet.

When a man has the drop on you and you are within easy reach of him, any of the following tricks may save your life, but they are all desperate resources: With a break-action revolver, if hammer is down, you may, by a quick movement, grasp the thumb catch of the revolver, release it and continue to pull until the revolver is completely opened, thus ejecting the cartridges. Mr. Walter Winans, in "The Art of Revolver Shooting," suggests grasping the barrel with the thumb under the catch, but I do not find it so effective as the method I have described. Mr. Winans also has a system of ejecting the cartridges from the new side-ejecting revolvers, but it is complicated and rather uncertain.



READY TO PULL.

With any revolver other than a break-action, it is better, in case the hammer is down, to grasp the cylinder; then, if you have strong hands, your opponent will be unable to cock his revolver. In case the hammer is up, you have a slim chance, unless by some device you can make your enemy withdraw his eyes an instant. Then quickly slip your thumb under the hammer to prevent it from falling on the cartridge. Grasping the cylinder also applies to hammerless revolvers.

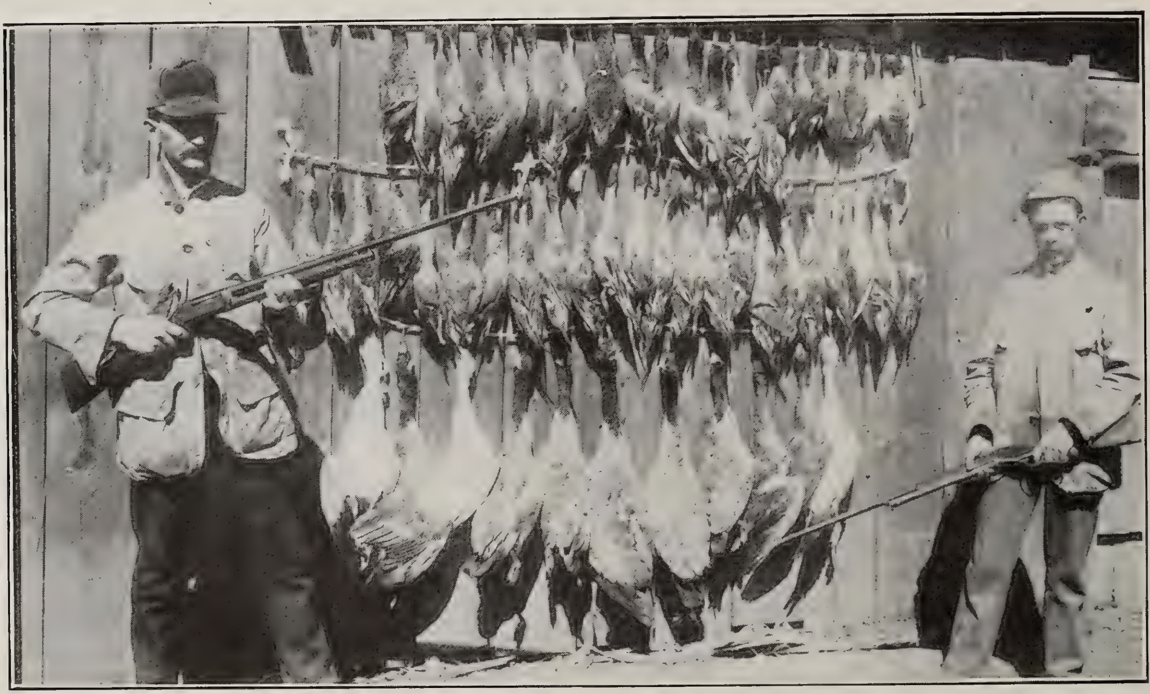
An excellent trick when your adversary has the drop on you, and calls for you to surrender your revolver, is to hand it to him butt first and upside down, with the trigger finger beside the guard. When he reaches out his hand for it, revolve the pistol with a quick motion so that the butt lands right in your hand. Then, if the revolver is a double action, pull the trigger; if a single action, hold trigger back and "fan" the hammer. This trick requires patient practice, but after a time may be done like lightning.

Some men like a single action revolver better than a double action, as the trigger may be removed or fastened back, and the hammer fanned, that is to say, cocked, and let fall by itself. I do not think this advisable.

When burglars call, do not carry a light, as it makes a fine target of you without materially aiding your search for the intruder. A large revolver with light charge is best for this work, as the heavy weapon is easier to shoot accurately, and the small powder charge is less likely to cause the bullet to completely penetrate his body, thus doing damage after passing through him. Rubbing the sights with phosphorus may be of aid to some, but I can tell approximately, by sense of direction, when the revolver is correctly pointed.

If you chance to meet your enemy outdoors, any object, such as a tree or a lamppost, makes an excellent screen for the body, even if it does not completely cover you.

While I hope those who read this advice may never have to make use of it, still if it becomes necessary for them to do so, it may be of value to them.



TWO MORE NEBRASKA SPECIMENS.
William McCaulay and C. A. Hillsabeck, Holdrege, Neb.

The quantity of game killed by these 2 men was not so much a disgrace to them as the fact that they sought cheap and disgusting notoriety by having the poor dead birds and their worthless carcasses photographed together. They should be ashamed of the display they have made of themselves and their game. I hope their friends, when they see this picture, will take occasion to convince these spring shooters that such pictures and such conduct are thoroughly disreputable.—EDITOR.

CAMPING IN COLORADO.

DR. J. N. HALL.

I occasionally meet some tired-looking physician who says to me,

"How can you get away to go camping in the mountains every year?" He implies that it is simply for fun one leaves the city and hunts and fishes through our great game regions. I might reply that I do not go camping primarily to have a good time. I go rather for the same reason that I insure my house against fire; because it is a good business proposition to do so. More people every year are learning that it pays a business or professional man better to take a vacation in the woods every summer, to have a pleasant time doing it, and to acquire a stock of reserve strength for the next season, than to stick closely to his work, make a little more money for a few years, and finally break down in health. A large proportion of diseases attack the victim because his health is below par, often, perhaps, only temporarily; while another man, equally exposed, escapes because he has a better resisting power. The one has patched up the little defects in his bodily mechanism, caused by the year's work, by a timely rest; the other has approached his season of heavy labor without the recreation he so much needs. The first, with a good digestion, and his blood vessels filled with good red blood, is exposed in a storm, and has a trifling hoarseness the next day. The second, equally exposed, has pleurisy or pneumonia, and tuberculosis follows.

I have no doubt that the time consumed in sickness among business men who do not take proper recreation vastly more than equals that taken for vacations by the others. It is extremely easy for me to decide whether I shall have my vacation yearly, and lose a few weeks' business, or work continuously and then spend 6 months enjoying an attack of typhoid fever or 6 years attempting to recover from tuberculosis.

In the past 20 years I have seen scores of men of my own profession who sought Colorado for health, and the almost invariable tale is that overwork reduced the doctor's strength, he took cold and the omnipresent germ of tuberculosis did the rest. This is just as true in other lines of work as in my own.

I take it for granted then, that one should have his vacation, and we shall next take up the question, "Where shall he go?"

I see many men and women whose idea of a vacation is to go to an expensive hotel, lounge in the smoking room, play pool or cards, attend a hop in the evening, drink plenty of strong drink, smoke continuously, and go home at the end of the appointed period. Fortunately they seem to be getting fewer, and those who delight to get close to nature for a few weeks in the summer are correspondingly increasing.

In the town and city we are subjected, in our civilization, to a thousand little influences which tend to wear out our nervous force. Poor ventilation, overheated air from the furnace, lack of oxygen because of its consumption by gas jets, inhalation of smoke and dust, with the ever present germs of disease, the nerve-rending clang of the gong on the passing car, the ring of the telephone bell, and scores of other annoying incidents of our daily life, continuously, nibble away one's vitality. In London, Sir Andrew Clark tells us, these and other deleterious influences so sap the strength of the population that a long search failed to show a single adult whose parents and grand parents had all been London-born. Except for the infusion of new blood from the country, the population would be extinct in 3 or 4 generations. These things all tell us plainly that we should go back to nature for our vacations. The more nearly we can approach to the conditions of life of the savage without his frequent lack of good food, the better it is for us, and the better for our descendants.

In describing my ideal vacation for a town-dweller and his family, I shall speak necessarily of Colorado and the neighboring States, since most of my adult life has been spent in them. From Northern Wyoming to Texas I have camped almost yearly, and I shall assume, in these days of cheap and luxurious railway travel, that my would-be campers are within reach of our mountains. Much of the mountainous part of the Western States is still Government land. In the valleys and on the plains, all of the good irrigable land is occupied by ranchmen, but it is a mere fraction of the total area of the State. An infinitesimal part is claimed by miners, and along the Union Pacific Railway, the original land grant is private property; but the immense forest regions are practically free to all comers. The great Forest Reserves are open to campers, and there they are free from annoyances from private ownership of land. All this portion of the State lies at an altitude of 5,000 feet or over, most of it above 7,000 feet. This is the ideal elevation for summer recreation. The nights are cool, and the heat of the day is tempered by the altitude, so it is never oppressive. From July till October severe storms are infrequent, though moderate showers, and often flurries of snow in September, are common. In the lower parts of the mountains June and October may be added to the vacation months.

During July, August and September anyone in reasonable health may safely camp under canvas in any part of this vast region. The game is found during this time at the higher altitudes, chiefly above 9,000 feet, for the cool days and the absence of flies and mosquitoes are appreciated by animals as much as by mankind. Fish may be found almost anywhere. It is, then, a question of accessibility in the selection of a camping place. From Denver one may start with a wagon and in 2 to 6 days' drive, over fairly good mountain roads, reach almost any desired kind of camping ground. The nearer parks are almost devoid of big game, though grouse and trout abound. The ground ascends so rapidly that within 50 miles of Denver one may reach mountain peaks which are covered with perpetual snow. Most of the valley land within that distance is used for ranching or grazing purposes, but within a mile of the road may be found excellent camping grounds.

One of the most beautiful camping regions in the world, for one content to do without big game, lies some 70 miles Northwest of Denver. This is Estes Park. Most of the land, unfortunately, belongs to an English company, so that camping degenerates into living in a rented cottage or at a hotel; but take a wagon and a stout team, with a few extra saddle horses, and push up Clear creek, past Idaho Springs, till at Empire, about 8,000 feet high, you strike the Eastern end of Berthoud pass. Then for a dozen miles you toil over the rugged range of mountains into Middle Park, and you have taken the first great stride in reaching one of the finest camping grounds imaginable. You may drive a day's journey to the North, and find, at Grand lake, a little village made up largely of the cottages of summer residents; and all about, in the mountains, lonely spots where you may occupy as much space with your camp as you please. Your ponies may graze in open spots, the woods furnish you free fuel, the streams the purest of water, and if you have selected the right place, no neighboring camp need interfere with your supply of fish. Grouse are fairly abundant, but few if any deer are to be found. You are still too near civilization.

Or you may turn to the Westward, cross Grand river, stop a day at Hot Sulphur Springs, find glorious fishing in the Troublesome and neighboring streams, shoot a few sage grouse, and eat them with your bacon and trout in content, for you are reaching the border of the land of the mule deer. In 5 or 6 days from Denver you should be in Egeria Park; and almost anywhere for 50 miles to the North and West you may camp, and have venison the next day.

If your time is more limited you may take the Denver and Rio Grande or the Midland Railway from Denver at night, get off the train the next morning at Wolcott, Glenwood, Newcastle or Rifle, outfit conveniently and at moderate expense, and reach the same region in 2 or 3 days' travel, or come to fairly good ground in a single day.

Many other localities in Colorado are excellent, but these specific examples will answer for the present.

You may drive your wagon to a favorable spot and unhitch your team, and you practically own all the earth in sight of your tent door. You must be provided with a license from the county clerk. See that you put out your camp fire, and obey the perfectly reasonable game laws; but aside from these things you are a free man in a free country.

It is generally better to put up a tent in substantial style than to stop at a deserted cabin, except to escape a storm The Indians learned, ages ago, that it was not well to camp many weeks in one spot, since disease visits those localities where imperfect methods of caring for the waste of the camp exist. About the deserted cabin many sources of possible danger may be found, because of the carelessness of previous occupants; while your open camp in the woods is certain to be healthful for some weeks at least.

The camping grounds selected are usually so high up the streams that the water supply is pure One should never knowingly use water which may have been contaminated by some stray case of typhoid fever farther up the creek; but such a contingency is rather remote in the mountains of Colorado.

Settled in camp in one of Nature's great sanatoria; we breathe the purest of air, because we can not possibly get any other kind. We are practically out of doors the whole 24 hours. We have plain, substantial food for 2 reasons; camp life does not readily lend itself to the preparation of fancy dishes, and the appetite engendered by the vigorous out-of-door exercise calls rather for baked beans and bacon than for *pate de foie gras*. The epicure who, in town, considers the frying of a steak a capital offence, learns that for a 40-mile horseback ride over the hills a pound of fried venison goes much farther than a pound of broiled beef. It has much better staying powers. Nature does not err in leading the camper to prefer the articles of slow, perhaps difficult digestion, to the more easily assimilated food suitable for the dweller in cities.

Were you troubled with insomnia when

you came to the camp? Bid it good-by. You will have no further occasion for the acquaintance while here. The man who arises at 5, eats a good breakfast, rides 10 miles on horseback, walks 2, kills a deer and brings him to camp leading his horse, will sleep that night if the bed is humpy, and the covers awry. I remember one summer many years ago, when I was much distressed with the heat, lost much sleep because of my night work, and fell off a dozen pounds in weight. I rode 40 miles horseback from the station, the first day out, toward the camp of my friends, and got lost in the darkness, almost within sight of it, but found a stream and slept out on a saddle blanket and a slicker by a big fire, while the pony crunched away at the succulent grass near by. I remember that glorious sleep yet! The man who resorts to drugs for sleep when vigorous exercise in the open air is attainable, is trying to commit suicide.

You are too tender for such camping out? If you are, and don't want to get over it, stop here. The man who is so wedded to the luxuries of civilized life that he can not enjoy and thrive under the primeval conditions of existence would better stay in his hotel. But his posterity will not rule the earth. I look with pity on the man who does not realize that the conditions of high civilization apply to but a fraction of the human race. He who does not know that the normal method of travel on the earth's surface is not by a palace car, but by walking or upon the back of a beast of burden, will never have a broad comprehension of mankind. The boy who learns Greek before he learns to ride a horse may make a college professor, but he will not ordinarily have such an insight into life as to be a mover of men. He who learns geometry before he learns to find camp alone is a poor, ignorant individual.

Most of our broadest men in business, in politics, in the pulpit, in the professions, have the fondness for out-of-door life which goes with a vigorous constitution and a strong mind. The hope for the future of our race lies in encouraging the modern tendency to get out of the ruts of civilization for a time every year, and live close to Nature for a season.

Although such camping out is desirable for almost everybody not actually ill, it is especially to be recommended to certain classes. He who, from his family history, fears consumption in himself or his children, may do more than drive away his chief enemy by such a vacation than by buying a store full of drugs. The lungs, insufficiently used, and possibly bound down by adhesions from a previous tuberculous pleurisy, expand under the influences of the rarefied air and the vigorous exercise. In 2 months I have seen narrow chested women discard good dresses because they could no longer button them about the chest, owing to its increasing girth. The anemic girl, lacking in her blood the oxygen-carrying iron, and ready to fall an easy prey to tuberculosis or other disease, increases the number of her red blood corpuscles, and her percentage of hemoglobin; and the pasty white face glows again with the ruddy color of health. She longs for good beef and eggs and milk rather than for chalk, pickles and slate pencils; and shows in her high spirits and her elastic step the change in her feelings. No drug can replace open air life and good diet in the treatment of anemia, and especially such life at a considerable elevation. It is well known among medical men that the blood at 5,000 to 10,000 feet altitude contains a greater number of red blood cells than at sea level. To those who have lived in the enervating heat of our Southern cities, and especially those who have suffered there from the great destroyer of the blood, malaria, the mountains are a haven of safety. A host of pilgrims from Texas and other Southern and Southwestern States seek this region yearly, and it is yearly increasing. The tonic influence of the altitude on the blood, the cool nights, with their corollary, refreshing sleep, and the increased appetite and power of digestion, all tend to restore these sufferers to perfect health.

I have spoken of insomnia. A few nervous invalids, not strong enough to rough it, are not relieved. Those able to ride, or hunt, or fish, however, sleep wonderfully well as a rule. Altitude predisposes to slumber in the normal individual, for a time at least, even in the absence of severe exercise.

Practically all lung diseases not accompanied with permanent shortness of breath, do well in the mountains. Many cases of asthma and other diseases where this symptom does exist do well. Medical advice should be sought on this point.

In general, advanced organic diseases of the heart are made worse here, but functional diseases of this organ are improved.

One will often be many miles from a physician, and a supply of simple remedies should be obtained on the advice of the family physician before camping. In this way many of the slighter affections may be easily cared for, and serious disease in camp is a rarity. It seems curious at first sight, but even a severe cold is rare in camp, for the constant exposure to the open air renders one less susceptible to such affections. The avoidance of sickness is more in increased resistance than in avoiding exposure to the cause.

One should not fear too much the effect

of an occasional wetting from a storm or a fall in the stream. I have rarely, if ever, seen harm come from this source, if the clothes could be dried as soon as one ceased to exercise. Most hunters and fishermen in the mountains have been wet through and dried their clothes by their own bodily heat without any harm. I do not of course recommend this; I mention it merely to show that an ordinary drenching is not to be expected to cause sickness even if one can not get dry clothing. A big dinner often answers in place of a change of clothes, as many of us can prove by experience. The increased dryness of the air in the mountains is here of advantage.

It is more dangerous to sleep in a damp bed, and it certainly is not especially comfortable. Particular pains should be taken in packing and in camp to protect the inside of bedding from exposure to rain. A wet tarpaulin on the outside cuts little figure if it can be dried out the next day.

The temptation to take plenty of exercise in the mountains is one of the best features of camp life. The liver, which does not work well in New York, with too much rich food and too little exercise, is likely to stop its complaining under the influence of a plain diet and muscular work, which increases every secretion. One should recall here Abernathy's advice to gouty Englishmen, "You can get well if you will live on a shilling a day and earn it by manual labor."

The increased demand on the heart leads to its improving in tone, for, like the digestive organs, it must rise to the occasion. The lungs, as we have mentioned, the skin, and all the organs take on new activity. Under the influence of the improved general condition many minor ailments, especially of a nervous nature, disappear. The influence of change has long been recognized as of great value in the treatment of disease. The tremendous change from a strenuous city life to that of the mountain camp often works an actual miracle.

THE MAN BEHIND THE GUN.

C. L. BAILEY.

I have followed the discussion,
  Read the logic and the lore,
As to what's the proper rifle
  And what's the proper bore;
And I've come to the conclusion
  After all is said and done,
There's a mighty lot depending
  On the man behind the gun.

Better use a gun that fits you,
  Though its caliber be small,
Than a mammoth mouthed old cannon
  That you can not shoot at all.
You can't kill game when you miss it,
  Though your bullet weigh a ton.
Just remember there is something
  In the man behind the gun.

Be it twenty-five or thirty,
  Or up to the largest size,
If the shooting stick is perfect,
  'Tisn't there the secret lies.
Let him have what bore he chooses,
  But before I bet my mon',
I would know the shooting metal
  In the man behind the gun.

When you're suffering with Buck fever,
  Or your nerves are on a "tear";
Your eyes are out of order
  And don't catch the notches fair;
You can miss your game dead easy,
  And of course it mars your fun,
But don't lay it to your weapon;
  It's the man behind the gun.

So let them scrap and wrangle,
  I'll not enter in their fight;
For I've come to the conclusion,
  Which I'm sure is nearly right,
Though the caliber's the largest,
  Or the smallest 'neath the sun,
There's a mighty lot depending
  On the man behind the gun.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman.

TRYING TO BE FUNNY?

Colorado Springs, Colo.

Editor RECREATION:

Someone has forwarded me a recent copy of RECREATION containing your characteristic complimentary article and pleasing picture of myself. I gather in glancing over your magazine that RECREATION approves of shooting 200 ducks a day. This is a tall limit but worthy the high aims and standard reached by RECREATION in other directions. With these views it was somewhat of a surprise that you should publish a picture containing only 80 ducks. These few birds were obtained in 4 hours, and not in 2 days, as stated in your article. The law in Utah is 40 ducks a man per day, and as there were 2 men in the boat, it entitled a bag of 80 ducks. As soon as they were obtained we pulled out for home. This was on a Saturday when there were many shooters at the camp and I could only be accompanied by my regular companion. From Tuesday to Friday I used to take out 4 men in the boat, so that with myself, the boat could lawfully bring home 200 ducks, your exact approved limit. Arriving on the shooting ground, a big boat blind was made with the 4 men in the rear end of the blind, with a box of cigars and a bottle of old rye among them to wet their whistles.

Then we were ready, when the ducks came in sight, for all 5 men to call, each in a different key, and in an expert and interesting manner, which rarely failed to bring the ducks right up over the 150 decoys that were artistically set out in front of us.

At noon, when the shooting quieted down, the 4 men would go in different directions over the marsh, and the ducks, disturbed while resting, would almost always come to my big bunch of decoys. You will regret to hear that the boat never quite reached your high standard of 200 ducks, the full legal quota. The best bags returned were 197 ducks and 3 geese, 187 ducks and one goose; 183 ducks and 11 geese, one swan. The birds were all fat and mostly redheads, mallards and pintails. All the game was sent to Salt Lake City, given away and distributed among the different charitable institutions, except one batch of some 300 ducks that were given away in Ogden.

If you had only put a stamp on the letter you claim to have mailed to me, it would have given me great pleasure to forward you a large photograph of the "Best Day," 197 ducks and 3 geese, nicely hung up in the form of a bower, with the 4 men underneath, each holding his pump "gas-pipe" gun, with the box of cigars, alas, empty, and the bottle of whiskey, also extra dry, in front of them. In the centre is yours truly with 3 double barrel guns and 3 shell cases, each holding 200 cartridges. The whole makes a grandly artistic and sportsmanlike picture that I feel sure would have greatly pleased you, and once having seen it, you never would give a second thought to a little bag of 80 ducks. Now, I can not say I quite agree with you or quite approve of shooting 200 ducks a day; yet, under the present laws of many States, it can be done. Still I am with you heart and soul in your fight to a finish against game hogs. It is my humble opinion, even if it does clash with yours, that 50 game birds of any kind in one day should be enough for any man or party. With such a small number of birds to get, the sportsman could start late in the day and get back early, and even then have a respectable bag of birds. Rest assured that law abiding people and good sportsmen, like myself, will never break the law. The present game laws in many States may be faulty, but that is not the sportsman's fault. I expect to go South in a few days, on a month's shooting trip, to a place where last year 100 quails and snipe were an average daily bag. This year I intend to stop after pounding them for 50 birds a day. I shall only take 6,000 shells with me. Will write you of my luck on my return. Meanwhile, I wish you every success in driving the game hogs out of business.

H. Gardner.

You are not only a game butcher, but a liar as well. RECREATION never advocated killing 200 ducks in a day, and you know it, if you know anything outside of your feed trough. Possibly you mean it as a joke. If so, it is as high a grade of humor as one might expect from your level. If some Southern sportsman where you threaten to go and kill 50 ducks a day does not put a charge of buckshot into your carcass before you get out of there, he will be neglecting his duty to his fellow men.—EDITOR.

BE CONTENT WITH FEW.

Some time ago Mr. Ralph Widdicomb of this city handed me a postal from you which said: "Is it true you killed 100 grouse in one day?" He asked me to reply to it, but I shortly after went North into the woods, and only remembered it on finding the postal when I returned. Last autumn

Mr. Widdicomb and I hunted grouse together 17 days. We have hunted together off and on for the last 14 years, know the country, are fairly good shots, and have excellent dogs. We are not and never will be game hogs. Our score during the season was 255 grouse, or an average of 15 each trip. Mr. Widdicomb killed 130 and I 125. We never "cleaned out" any locality, and can hunt over the same ground next year as we did last with the assurance of equal success.

I do not know who conveyed to you the interesting information you received, but feel that we should not go on record as killing more game than we ought.

Stewart E. White, Grand Rapids, Mich.

ANSWER.

No, you are not exactly game hogs, but you come mighty near the line. You averaged 127 birds each for the season. That is at least twice as many as any decent sportsman should ever kill in a year. Your shooting would not have been excessive 10 or 20 years ago, when birds were abundant; but at this day, when the birds are threatened with extermination everywhere, any man should be satisfied with 50 in a year, and the best plan for killing this number would be to take 10 days for it, limiting your bag to 5 birds each day. Suppose you get these in 5 hours in the morning, so much the better. You can find 100 things in the woods every day to interest you and occupy your time without killing something every few minutes. Several States now have laws limiting the number of grouse which any man may kill in a day to 10, and Pennsylvania has a bill before her legislature to reduce the legal number from 10 to 5. It is nearly sure that this bill will pass. New York has a law limiting the number which any man may kill in a year to 36. That is too many for any Eastern State. In Michigan you have more birds than we, and it might yet be permissible to kill 50 in a season, but but no man should kill more than that, even if the law allowed him to kill 1,000.—Editor.

COLLEGE PRESIDENT FINED.

I enclose a clipping which I think will interest Recreation readers.

> Last week Prof. O. C. Hagermann, president of Lexington University, visited friends at Bethany College. Before returning he concluded to spend a day hunting. Accordingly he set out early Saturday with a gun and dogs and succeeded in bagging 38 quails. Saturday night he came to Wellsburg to take the train for home, and while he waited he told a friend of his success. Unfortunately Game Warden Henry Gasmire heard it. He arrested the Professor and caused him to appear before Squire Russell to answer to the charges of shooting quails out of season, of hunting without the license required of hunters from another State, and of shooting more than a dozen quails in one day. The Professor paid $29 and costs for his day's sport.—Morgantown News.

I noticed that you roasted a man who wanted to advertise ferrets. I wish all editors would do the same. Ferrets have about exterminated rabbits here. One day last fall a friend and I, with 2 good dogs, hunted over territory where 4 years ago we started 25 or 30 rabbits. All we saw was one rabbit, and that was floating dead in an old well. My companion suggested that the rabbit had seen us coming, had mistaken us for some of the ferret brigade, and had concluded it was easier to drown than to be punched to death in a bag.

B. S. White, Morgantown, W. Va.

Why should the editor say "unfortunately Game Warden Gasmire heard of it?" I consider it a great piece of luck for the cause of game protection. Gasmire is a man after my own heart, and I trust he may be fortunate enough to hear of every man who violates the game or fish law in his district for the next 10 years.

I always like a man who hunts big game successfully. The president of Lexington University was big game in this instance and he should have known better. In fact, he should be teaching his pupils proper respect for the laws of the land, instead of setting them an example in the way of breaking those laws. The board of regents or trustees of the college he presides over should promptly relieve him from duty and put a man at the head of that institution who will bring up the pupils in the way they should go.—Editor.

OTHERS APPEAL FOR THE GREY SQUIRREL.

I am pleased to see your appeal for the preservation of the grey squirrel. I do not see how any lover of nature and the creatures of the woods can fail to second such a motion. No creature which crosses the path of the nature lover appeals more openly to his better nature than this handsome, vigorous, cheery little fellow. He personifies the very charm of woodland life, the freedom of it, the hardihood that comes from honest toil and the ability to outwit all enemies but man. I have seen his numbers in Massachusetts dwindle from comparative plenty to general scarcity and I know that in New Hampshire the beech and oak woods which knew him well are seeing his sure and ultimate extinction.

I am aware of his migratory nature in times of food scarcity and there may be many other contributing causes in the matter of his decline; but none is so important a factor as his relentless pursuit with dog and gun. It is usually done by the hunter who can not find success or pleasure in shooting on the wing, who places chief reliance on the squirrel's innate curiosity to lead him to his death. Let us spare him from the general destruction which future generations will lay at the door of the hunters of the 20th century. Let us keep his graceful form and cheerful presence to lead our children to the woods when the grouse, the woodcock and the quail we love so well shall have joined the passenger pigeon and the wood duck in a regretable extinction.

Ernest Russell, Worcester, Mass.

You have said a true and valuable word in behalf of the grey squirrel. We ought in some way to make it a crime to shoot any squirrel anywhere, red, grey or black. There is no animal our woods, East or West, could less afford to lose than the different species of the grey squirrel.

David S. Jordan,
Stanford University, Cal.

A WELCOME RECRUIT.

I am greatly interested in game protection, and being one of the class of much criticised game wardens, I sympathize with you in your efforts along this line.

Five years ago I was one of the worst poachers in this county. RECREATION opened my eyes to the wrong I was doing. I stopped. Next came a desire to induce others to do likewise. I talked game protection wherever I thought it would do any good, but found it needed something more than talk to persuade some people. During the years '97 and '98 there were 4 cases brought up for violations of the game laws, but owing to the prejudice existing and because of the wardens not bringing the right kind of evidence, 3 of the 4 were acquitted. They were all undoubtedly guilty. Our game was going fast and the fishing was poor.

The next year I tackled the thing. I realized I was up against a hard proposition, and was advised to drop it, being told I would lose all my friends. Well, I have lost some, and it has cost me a good deal in a business way; but I have the satisfaction of knowing that the laws are more respected and that game and fish are on the increase. During '99 and 1900 I brought 25 or 26 cases and secured convictions in every case.

Our system of game protection is not encouraging to the local wardens. We get only the regular fees allowed a sheriff, in case we catch and convict our man. If we don't catch him, which often happens, we we have to make out our bill for expenses, and as often as not that is disallowed. There is a prospect of a change in the near future, as sportsmen all over the State are disgusted with the present system.

Mark Craw,
Game Warden, Traverse City, Mich.

EDITORS FALL IN LINE.

I enjoy RECREATION more than any other periodical that reaches my desk. Your hog roasts are the best item on the bill of fare. Here is a clipping from the Dayton, (Ohio) Herald:

> Mr. C. F. Weinman has returned from Frankfort, Ross county, after a week's hunt. He reports that the local K. of P. lodge of Frankfort divided its membership and started out to secure the necessary game for a big supper. There were about 50 men on a side, and they started at 6 in the morning, with the understanding that everybody was to be in at 8:30 P. M.
>
> The party that returned on time and won the count reported 218 rabbits, 6 squirrels, 1 woodcock and 193 quails. After the time limit had expired, the other party returned with additional counts to the number of 118, making a total slaughter of 536. Such a killing of the innocents is an outrage in any civilized community. That a body of intelligent men, representing an order whose object is the elevation and betterment of mankind, should be a party to such an affair, seems incredible. Surely the laws are lax that permit such wholesale slaughter and the running at large of such a gang of remorseless game fiends.

If above be true, K. of P. must stand for Kings of Porkers.

J. E. Cavey, M.D., West Alexandra, O.

ANSWER.

Here is an editor who has hit the trail in pursuit of the game hog. Every month I get more clippings of this character from local newspapers than I did in the previous month. However, these newspaper men rarely know what publication set the pace for them in roasting game hogs; but the readers of RECREATION know. May this wholesome sentiment continue to spread until every newspaper editor in the whole country gets into line. When the day comes that the game butcher invariably gets a thrust in the neck when he makes a big bag instead of being patted on the back by his local newspaper, the millenium of game protection will have arrived.—EDITOR.

RESULTS ARE WHAT COUNT.

The answer you gave the man who wrote of killing 19 antelope in Wyoming was all right, but the way you abuse game hogs in general does not meet with the approval of as many readers of RECREATION as you may believe.

If you must roast people do so in a less abusive manner. If you were talking face to face with some of your readers in the West, and used such abusive terms as you sometimes apply to them in RECREATION, there would be trouble in a hurry. I am not another "squealing game hog." I do not run deer with dogs, have not used a shot gun for 15 years, and I am never seen in company with a man who uses bird dogs.

A. A. Haines, Armington, Mont.

ANSWER.

I hope to make several more trips to the West before I die, and I fully expect that if I should come in contact with some of the men whom I have branded, I should have to do some shooting in self defence. Possibly some one of them may get the drop on me; but if so, I shall not be the first man to die in a good cause.

If these men want me to quit calling them game hogs, they must quit being game hogs. That is the only remedy while I live, and run RECREATION. I am not trying to reform the game hogs, by any means. I am trying to make them and their work so disreputable that all decent men and boys will avoid being led into their ways. In this work I am succeeding to a much greater extent than you or any other man outside of this office can ever know. It is true I have lost many good friends on account of my work, but it is because they do not know the results of it.—EDITOR.

SHOULD JOIN THE ARMY.

The F. G. Williams, of Ferndale, Cal., who bagged 61 ducks one day last fall is a prominent business man of that town, and, I understand, is president of the gun club there. I have been told that he frequently shoots 30 or 40 ducks in a day. I think you could teach him that 20 ducks should satisfy any man for one day's shoot.

Every man who can afford a gun and ammunition can afford to put up $1 a year to help protect and increase the supply of game by joining the L. A. S. I think the reason many do not join, who otherwise would, is that they think the League was organized chiefly to protect game for the rich sportsmen. Yet you can hardly blame some of us who live here in the mountains. The deer feed on our ranges, and in some cases destroy our orchards and gardens. Then the city hunter, who can have his meat brought to his door during the close season, comes out when the season opens and kills 15 or 20 deer, and perhaps a steer belonging to the rancher. So long as such work goes on we cannot expect the rancher to go without meat, and furnish range for deer in order that strangers may slaughter them. As a rule, the rancher or stockman kills but few deer in a year, and those only for food. With some L. A. S. members scattered through the mountains, and a limit placed on the number of deer and other game animals and birds one man may kill, game in this country would increase so all could have a share.

Your war against those who slaughter game in great numbers will not be in vain. I hope to see the day when every man who hunts will be a member of the League.

D. S. Ballard, Bridgeville, Cal.

DEER, FISH AND GAME HOGS.

I am greatly interested in your excellent magazine, and always begin to hang around the newsstand a week before its arrival. I am specially pleased at your stand for the protection of game.

Game is plentiful here. Deer are frequently seen within a mile of town, while 10 miles from here they are plentiful, and there are a few bear. Small game is abundant, rabbits, ruffed grouse, prairie chickens and squirrels being found within an hour's walk from town. Quails are greatly on the increase. They are so tame in some cases that they come every morning to eat with farmers' chickens. We have few ducks here. It is doubtful whether there are 25 killed here in a year. We have a few woodcocks, but I do not believe 10 persons in town know we have them.

We have little fishing; a few trout, rock bass and pickerel. A dam went out in the Eau Claire river, the only large river near here, last summer and a great many pickerel came up the river. As soon as it was known, every large pool was dynamited or seined. In 2 weeks there was not a pickerel left.

Some parties were found seining and fined $1 a pound for all the fish found in their possession. There are few game hogs here, but plenty of fish hogs. Quite a number of our sportsmen take RECREATION, and all are delighted with it. Success to you. I wish your circulation were 300,000. I am a friend of the "little red devil" in spite of all said against him.

Edgar Secor, Augusta, Wis.

STOP THE SALE OF GAME.

My only recreation the past 26 years has been duck shooting. I have shot on Illinois river the last 16 years. Unless something is done it will be impossible to get ducks on the Illinois in 2 or 3 years more. It has been said by a college professor, I believe, that it would be impossible to exterminate ducks with the shot gun. It has also been said that their diminishing number is due to the gathering of their eggs for commercial purposes. If this is true, could the destruction of the eggs be stopped?

T. S. Hitt, M.D.,
Indianapolis, Ind.

ANSWER.

The college professor is entirely wrong in his statement. The ducks and geese have been reduced probably 75 per cent. in the past 10 years by the shot gun; but not in the hands of sportsmen. It is the market hunter who follows the ducks from the Canada border to the Gulf of Mexico; who shoots them all fall, winter and spring, and ships them to market. That is what will clean them up in 5 years if the sale of game is not stopped. There is little commercial traffic in the eggs of wild ducks and geese. There is a provision in the Dingley bill which absolutely prohibits the shipment of eggs or any product of the eggs of game birds into this country from Canada. Of course the Indians and some of the white people in the far North, the nesting grounds of these birds, do gather their eggs and eat them, but that would not make much impression if the sale of the birds could be stopped.—EDITOR.

THE LIMIT VARIES.

Please tell me how many ducks, quails and chickens a man may kill without making a hog of himself.

Louis Niles, Sioux City, Ia.

ANSWER.

It is difficult to answer your question explicitly. Local conditions govern this matter to some extent. It may be generally stated, however, that no man should kill more than 15 quails, ducks or chickens in any one day anywhere. There may be some exceptions to this rule in States where game is abundant; for instance, in Texas, Oklahoma and Indian Territory a man might reasonably be allowed to kill 20 to 25 birds a day. On the other hand, in New York, Pennsylvania or New England, where quails are exceedingly scarce, a man who would kill more than 10 in a day would be greedy,

In Iowa, Minnesota, and Dakota, no man should kill more than 15 ducks or chickens in a day nor more than 100 of these birds in a season, no matter what his opportunity may be. The laws of Colorado allow a man to kill 50 ducks in a day; in other words, the laws of that State allow a man to make a hog of himself. In my judgment, no decent sporstman would kill more than 15 or 25 ducks in a day at the outside, notwithstanding the legal provision. Any man can keep on shooting all day, but it takes a gentleman and a true sportsman to stop when he gets enough, with plenty of game still in sight.—EDITOR.

ON THE ST. REGIS.

I spent 13 weeks in the Adirondacks last summer and fall, and much of that time in or about Brandon, Franklin county, N. Y. The village is reached by the New York & Ottawa R. R. There are 2 hotels in the place. One, kept by Henry Lewis, is well equipped as compared with the ordinary country hotels, and the rates are reasonable. The St. Regis river flows within a mile of the hotel and furnishes good duck and deer hunting. On the 16 mile level from Brandon, to the State dam, opportunities are frequent for getting a deer. In a good season, when the water is not too high, hunters often report seeing an average of one deer to each of the 16 miles. It would be hard to find a better trout stream than the St. Regis, and in the spring even the novice can catch trout there without difficulty. The scenery of the region is fine. From the hotel one can see mountain peaks in almost any direction, Mt. Marcy, Whiteface, Blue Mountain, Buck Mountain and St. Regis being among the number. St. Regis is easily accessible for climbing, and from its summit can be seen 64 lakes and ponds. There are several efficient guides living in the village, and a sportsman securing the services of Walt Stevens, Dunham Allen, Geo. Campbell, or Ed. Le Tray may be sure of a good time and game enough.

Albert C. Coon, Oswego, N. Y.

COSTLY VENISON.

Just how many persons will get into trouble over the deer that was found concealed in the storehouse at Wertz & Guncheon's lumber camp is difficult to tell. One of the most startling things in connection with it is the statement made this afternoon that the venison, which is now being served to the patients of the Williamsport hospital, was meant to be served at a banquet to have been given in Washington, D.C.

A man who says he is acquainted with the facts, stated at the alderman's office that a prominent citizen had written to certain men in the woods to get a deer for him and ship it as soon as possible. The deer was secured but the men seemed afraid to ship it. The Lycoming Sportsmen's Association gave the State authorities the necessary information and the finding of the deer's carcass followed. As a result there will be no swell dinner at which this venison will be served.

George Guncheon, who is of the firm of Wertz & Guncheon, came to the city this morning and at one o'clock went before Alderman Kellenbach for a hearing on a charge of having deer in his possession out of season. He pleaded not guilty. Constable Bunnell, of Waterville, who found the deer, stated that Mr. Guncheon opened the door of the building in which the deer was kept. It was in Wertz & Guncheon's lumber camp. The defendant offered no defence and Alderman Kellenbach sentenced him to pay a fine of $100 and costs. Through his attorney, H. G. Troxell, he appealed the case. Bail was fixed at $300, which was furnished by H. C. Bubb, of this city.—Williamsport (Pa.) Sun.

SHORTEN THE SEASON.

Correspondents of newspapers in this locality have expressed their opinion that the deer season ought to close earlier. I think as well as they, that the law should be changed and the season shortened by at least 10 days. I should not change the opening day, but if the season ended 10 days earlier it would give hunters time enough to kill all the deer that can be spared. If the present law continues in force, and snow comes every year as early as it did this, our Adirondack deer will in a short time be exterminated. Along the A. & St. L. R. R., from every station beyond White Lake, deer were brought out by the score. The snow was so deep that they had begun to yard, and anyone could kill the limit and more. Of course, few hunters threw away the chance to get what they could. It is estimated that 6,000 deer were brought out of the woods, to say nothing about those that were not brought out. I hope our law makers will look into this matter and change the law.

W. T. Crill, Westernville, N. Y.

STRAY BULLET OR STRONG BEVERAGE?

Wisconsin papers have been publishing accounts of the killing or wounding of deer hunters by stray bullets in the woods. Excited by those reports some novices are trying to persuade the Legislature to prohibit the use of high-power rifles in this State. I doubt if a man has ever been hit by a stray bullet in our deer country. It is everywhere heavily timbered, and a bullet could go but a short distance before striking a tree. The unfortunates who were shot received their injuries at the hands of hunters too muddled to know a deer from a man, or a swaying bush from a bear. If high-power whisky could be kept out of the woods, high-power rifles would do no harm. In but few cases is the hunter who shoots another manly and humane enough to assist his victim. Generally he sneaks away, leaving the sufferer to die or recover as best he may. Then the papers tell of another hunter hit by a "stray bullet."

Andrew J. Ellis, Waukesa, Wis.

STOCK PUBLIC LANDS.

In March RECREATION I saw an article concerning the Cardeza party in which they were scored for the destruction of game. You say they took out licenses to kill 3, 5 or 8 caribou. I think a man who takes out a license to kill 5 or 8 caribou is as much a game hog as his unlicensed brother, who probably would also legalize his brutality if he could afford it. Moreover, I think the fact that a man owns a private preserve is no excuse for his killing 100 birds a day on that preserve. If game is so plentiful with him he should put some on the public lands, and give less fortunate men a chance. Our Legislature has just passed a law permitting owners and lessees of lands to kill hare and rabbits at all seasons. That is a great mistaken. In effect it permits the killing of anything at any time.

J. R .Jones, Dunmore, Pa.

ADIEU WOOD BUFFALO.

The wood buffalo, the noblest and one of the sole remaining remnants of the bison family not in captivity, are becoming rapidly extinct according to a well known Northern trader now in Edmonton. The haunts of the wood buffalo lie 2 days' travel from Fort Smith. For a number of years these animals have been protected by a law which prohibits the killing of them, but the 1st of January, 1902, this protection expired. Notwithstanding this attempt by the government to prevent the extermination of the animals, the trader referred to was of the opinion they would be extinct in a few years. "There is not an animal in the herd," he said, "that is under 3 years of age. The reason of this is that the wolves follow the bands day and night and kill the calves. There are only about 300 buffalo left and their range is in a country of about 200 miles square.—Edmonton (Alberta, N. W. T.), Bulletin.

The Canadian government should detail a company of its Northwestern mounted police to patrol the buffalo country to keep hunters out of it, and to trap and kill off the wolves.—EDITOR.

GAME NOTES.

Will you kindly inform me when the season closes on antelope in this State?

C. C. Keeler, Jr., Luella, Nebr.

ANSWER.

I regret to say that the open season for antelope in your State is August 15th to November 15th, but I trust that neither you nor any other decent sportsmen will kill an antelope in Nebraska or elsewhere at any time within the next 10 years. You and all the other good men in your State should unite in an effort to induce your State Legislature to pass a law prohibiting the killing of any antelope or elk before 1912. Nearly all the other States having any antelope have passed such laws and Nebraska should have been one of the first instead of one of the last to adopt this important measure.—EDITOR.

We have had a great ducking season; batteries the first week sold, on an average, for $100, and blinds did proportionately well. The Swan Island club, about the most prominent club on the sound, has placed a limit—25, I think—on the number of ducks a member may kill in a day. This is in strong contrast to the Currituck club, where all records were broken, all guns averaging 100 ducks the opening day. Such large bags were possible because the Currituck marshes were baited long before the season opened. Though there has been a notable increase in all varieties of water fowl, it would be well if all our clubs would follow the example of the Swan Island club and limit the slaughter.

A.S. Doane, Waterlily, N. C.

Out on one of the little flyways north of Cozad on Friday afternoon last, George A. Hoagland bagged 47 mixed ducks, but Mr. Hoagland can kill ducks where other men wouldn't even think of looking for them.—Omaha World.

I wrote Mr. Hoagland, asking if this report was correct. Here is his reply:

The report that I killed 47 ducks in one afternoon is not true. The only duck shoot I had last fall was about the last of

October. Then I spent a day with the teal and bagged 43.

G. A. Hoagland, Omaha, Nebr.

And that is at least 3 times as many as you should have killed in a day. Nowadays decent sportsmen are content to quit when they get 10 or 15 ducks in a day's shooting.—EDITOR.

In May RECREATION I read a communication from Quaker, Philadelphia, Pa. Having been a resident of Wyoming over 30 years, I can not pass that by, though I presume I shall make Mr. Quaker's bristles rise. I suppose it would please all the swine, if the people of Wyoming would say, "Come on, piggy, we have a few deer and antelope left, and you might possibly find a live elk ready to be slaughtered." Quaker is, undoubtedly, one of those men who stop in their career of destruction only when they can not find anything more to destroy. I assure him that the people of Wyoming will be only too glad to keep what game there is left and dispense with his porcine presence hereafter. C. W. Morgareidge, Wolf, Wyo.

The late Wm. S. Kimball of Rochester, N. Y., was the prime mover in introducing North Carolina and Virginia quail on this island in '89–'90. He also introduced cotton-tails, jack rabbits and white hares. People began shooting the quails before they had time to increase, so we had a 3-year prohibitive law passed by the Legislature. Since that expired the birds have had only the protection afforded by the State law. Natural conditions have prevented their becoming numerous. Neither Mr. Kimball nor I ever shot one, although they were turned out on the Kimball & Hills farms, nor have I heard of a man shooting them who was interested in bringing them here.

Isaac Hills, 'Sconset, Mass.

Let me confirm the statement made by Mr. John Sharp, State Fish and Game Commissioner of Utah, and ask you to turn your big guns on our law makers. Every word of Mr. Sharp's statement is lamentably true. You brand a man that takes more than his share a hog. Try to find as good a name for men who have it in their power to preserve the fish, yet willfully ignore and disregard their duty, and let millions of fish run out in fields and meadows to die each year. They, like their constituents, meanly begrudge the few cents it would cost to screen their ditches and drains.

H. D. Mapes, Ogden, Utah.

Wild game was never so scarce at this season of the year as now, attributable to the stringency of the laws of States tributary to Chicago's supply. In some sections it is almost impossible to ship out in a legitimate way and in others the restrictions on killing are so closely drawn as to prevent shippers from obtaining any considerable quantity. Formerly the venison supply was so ample that choice cuts cost about the same as the corresponding parts of beef, but this year prices are so advanced as to practically bar the use of deer meat from the tables of any save the wealthy. Venison is now quoted at 40 to 45 cents a pound, while at this time in previous years it was selling at 20 to 25 cents.—Chicago Tribune.

And the League did it.—EDITOR.

Frank Bates, Medaryville, Ind., shipped 30 quails to Chicago in violation of State law. He was prosecuted by the United States District Attorney, under the Lacey law, and on conviction, was required to pay fine and costs, amounting to $61.48. It is hardly likely Frank made enough on the 30 quails to pay this fine and have anything left worth speaking of to lay aside for rent day. It would be more profitable for him to deal in domestic poultry hereafter, rather than in game.

I thoroughly approve your campaign against the game hog. The only way game can possibly be preserved is for the people to co-operate with nature instead of always pulling against her. One way to accomplish this is by exposing the hogs and showing the foolishness of their acts. To me there is just as much pleasure in shooting at a target in the back yard as in shooting game, when there are no odds to overcome.

Subscriber, Kansas City, Mo.

Quails and grouse are so scarce here that they should be protected for a term of years. We would have good rabbit shooting if the farmers would allow hunting on their lands. They were so imposed on by hogs who shot poultry, tore down fences and did other damage, that they now refuse to allow any shooting whatever. A party from this town recently paid $27 in fines and costs for hunting on Sunday in an adjoining county.

Geo. F. Kunkel, Nazareth, Pa.

While in the vicinity of Richmond, Va., last spring, I noticed many large flocks of robins. A boy told me they were flocking to go North. Then he astonished me by saying he had killed and sold $17 worth of them and expected to kill lots more. So it seems we protect robins largely for the benefit of pot hunting boys in the South. It is a pity game laws can not be national in scope.

J. R. Bray, Waverly, N. Y.

I admire the gall displayed by A. E. McKenzie, of Denver, Colo., when he tried, in September RECREATION, to counter an anticipated roast. The bluff was a little too transparent, coming from a man who

admits having butchered a wagon-load of ducks. If there were 10 men like the editor of RECREATION, there would not be a game hog left alive, even in Denver.
John Nordstrom, Gothenburg, Neb.

I have just returned from Florida, where I found quails more numerous than in any other State I have visited. Everywhere in Florida I found members of the L. A. S. and readers of RECREATION. Mr. Pleas, of Chipley, told me the League was gaining steadily throughout the State, and that every year the game laws were better enforced.
L. Shannon, Audubon, Minn.

On a recent trip to Pike county, Pa., I secured 2 bucks. One was a small 3-prong; the other was the largest deer that ever fell to my rifle, and I have hunted many years in Maine and Canada. The big buck weighed 218 pounds, dressed, and had large and symmetrical antlers.
J. E. Kneedler, Phila., Pa.

I wish Ohio would forbid the killing of squirrels, quails and grouse for a term of years. They are becoming exceedingly scarce in the Southeastern part of the State. In a forest where 2 small parties of campers killed 186 squirrels in one week a year or 2 ago, not a squirrel could be found last fall.
Wade McIlrath, Cleveland, O.

Game is scarce here, quails and prairie chickens being nearly gone. Our season for quails and prairie chickens is September 1 to January 1, yet I have seen men go out in June and July and kill quails. Rabbits are abundant, and in spring we have a few ducks and brant.
Geo. La Grange, Genoa, Neb.

Woodcock and grouse were scarce last season. Quails were abundant but undersized. Our Game Commission hopes to secure the passage of a law protecting grouse for a term of years. Deer are frequently seen in Washington county.
E. R. Lawrence, Westerly, R. I.

Last winter was a favorable one for our quails, though they were mercilessly shot before and after the shooting season. Pinnated grouse seem to about hold their own. Fox squirrels are fairly plentiful, cotton tails almost a nuisance.
Daniel Arrowsmith, Ellsworth, Ill.

The use of decoys for water fowl and shore bird shooting should be prohibited. Such shooting can hardly be called sport; anybody can hit birds on the ground or water. At best it is pot shooting at an alighting or rising flock.
G. B. Gardiner, Peace Dale, R. I.

I notice in May RECREATION that G. H., of Mason City, Iowa, says rabbits are a nuisance in this State, and that ferrets should be used to hunt them. He is mistaken. Rabbits are not over abundant, and they should have a close season like all other game.
F. J. Nichols, Atlantic, Iowa.

The Brown's Tract Guides' Association held their annual meeting at Boonville, January 9, and elected the following officers: President, Richard Crego; Vice-President, Garry A. Riggs; Secretary and Treasurer, A. M. Church.

There are now 400 members belonging to the association and the organization is doing excellent work for the protection of game in the Adirondack forests.—Utica (N. Y.) *Press.*

Rabbits are so abundant here that it is no fun to hunt them with a shot gun. Our duck shooting has been spoiled by the draining of the swamps. I got 5 ducks one day last season, but that was exceptional luck.
Jack Mallard, Rochelle, Ill.

Duck shooting was better last fall than for several years. Had a 10 days' camping and shooting trip and killed in all 59 ducks. My biggest bag in one day was 14. I could have killed more, but was satisfied.
S. E. Sangster, Pt. Perry, Can.

Game here last season was more plentiful than usual, particularly grouse, quails and rabbits. Some of the boys have had a few good days with black ducks, which also seemed more abundant than they have been the past 2 seasons.
E. W. S., Westerly, R. I.

Quails and rabbits are plentiful, but grouse are scarce. You could not find a woodcock here if you traveled 25 miles.
Alex. Webster, Beaver, Pa.

I am much in sympathy with your war on game hogs. Keep it hot and heavy. Turn the 30-30's on them.
L. A. Jordan, Saylesville, R. I.

Game has increased materially here since the passage of the law forbidding its shipment out of the State.
L. B. Gilmore, Blooming Valley, Pa.

Game is scarce here. Unless an extended close season is put on prairie chickens they will soon be gone.
Everett Brown,
Pleasant Grove, Ind.

Quails are abundant here. Other game is scarce. So, also, are fur bearing animals.
Chas. Wilson, New Lenington, Ohio.

The severe weather and deep snow of February killed off most of the quails here.
H. T. Rice, Painesville, Ohio.

FISH AND FISHING.

ALMANAC FOR SALT WATER FISHERMEN.

The following will be found accurate and valuable for the vicinity of New York City:

Kingfish—Barb, Sea-Mink, Whiting. June to September. Haunts: The surf and deep channels of strong tide streams. Baits: Blood worms, shedder crabs and beach crustaceans. Time and tide: Flood, early morning.

Plaice—Fluke, Turbot, Flounder. May 15 to November 30. Haunts: The surf, mouth of tidal streams. Baits: Shedder crabs, killi-fish, sand laut. Time and tide: Ebb, daytime exclusively.

Spanish mackerel—Haunts: The open sea, July to September. Baits: Menhaden, trolling—metal and cedar squids.

Striped Bass—Rock Fish, Green Head. April to November. Haunts: The surf, bays, estuaries and tidal streams. Baits: Blood worms, shedder crabs, Calico crabs, small eels, menhaden. Time and tide. Night, half flood to flood, to half ebb.

The Drums, Red and Black. June to November. Haunts: The surf and mouths of large bays. Bait: Skinner crab. Time and tide: Day, flood.

Blackfish—Tautog, April to November. Haunts: Surf, vicinity of piling and old wrecks in bays. Baits: Sand worm, blood worm, shedder crabs, clams. Time and tide: Daytime flood.

Lafayette—Spot, Goody, Cape May Goody. August to October. Haunts: Channels of tidal streams. Baits: Shedder crabs, sand worms, clams. Time and Tide: Day and night flood.

Croker—July to October. Haunts: Deep channels of bays. Baits: Shedder crabs, mussels. Time and tide: Day flood.

Snapper—Young of Blue Fish. August to November. Haunts: Rivers and all tide ways. Baits: Spearing and menhaden; trolling pearl squid. Time and tide: Day, all tides.

Sheepshead—June to October Haunts: Surf and bays, vicinity of old wrecks. Baits: Clams, mussels, shedder crabs. Time and tide: Day, flood only.

New England Whiting—Winter Weak-fish, Frost-fish. November to May. Haunts: The surf. Baits: Sand laut, spearing. Time and tide: Night, flood.

Hake—Ling. October to June. Haunts: Open sea surf, large bays. Baits: Clams, mussels, fish. Time and tide: Day and night, flood.

Weak-fish—Squeteague, Squit. June to October. Haunts: Surf, all tideways. Baits: Shedder crabs, surf mullet, menhaden, ledge mussels, sand laut, shrimp. Time and tide: Day and night, flood preferred.

Blue Fish—Horse Hackerel. June to November 1st. Haunts: Surf, open sea and large bays. Baits: Menhaden, surf mullet and trolling squid. Time and tide: Daytime; not affected by tides.

LAKE MASHIPACONG.

BARTON W. EVERMANN.

In the New Jersey mountains, some 10 miles South of Port Jervis, on the Erie railroad, lies Lake Mashipacong. The drive from the railroad station to the lake is an interesting one. Crossing the Navesink near its mouth in the edge of the town, the road for a few miles passes through well kept farms and by comfortable farm houses. Here the road is smooth and the team jogs along at a fairly good speed, but not too fast to prevent one from taking in the many beauties of the scene around. Then the road makes a turn to the left and begins to ascend. The grade becomes more and more steep, the rocks in the road become distressingly numerous, the horses slow up, the driver remarks that "it is best to go a leetle slow along here," and we brace ourselves and hold on. We soon see, however, that though there are some rocks in the road they are neither large nor troublesome, and, dismissing them from our mind, we take note of the things by the wayside. The road is narrow, and the trees, in many places, arch it over, forming brilliant canopies under which we drive. It was early October, the best of all the year, when the trees are glorious in their liveries of golden yellow, russet, red, and changing green. The maples and oaks are richest, while the chestnuts, though yet green, are beginning to show yellow on the exposed leaves. Most of the timber is second growth and only an occasional old tree is seen. There is one, in a field—a huge old chestnut with gnarled trunk and scraggy branches—standing out in the open and receiving no protection from sun or frost. Here is another, by the roadside; an old patriarch which has been spared these 100 years, since the farm was opened, mayhap by the great-grandparents of the honest, frugal farmer who to-day dwells in the house hard by. What happiness that old tree has brought to the 3 or 4 generations of children who have played in its shade, climbed among its branches, and eaten of its delicious, wholesome fruit! Sturdy country lads and lasses they doubtless were! The old tree has seen them coming on in overlapping numbers, the older ones growing still older and coming to the tree less often as time went on, and finally returning only at long intervals or not at all; but little tots coming on more or less regularly every year to take their places; and the immortality of the child to the tree and of the tree in the mind of the child is not a mere fancy.

Only a few children play about the old tree now, for we found ripe nuts on the ground under it. I wonder if many of those who knew it in the days agone are still alive; do they sometimes yearn for the shade and the cool and the peace of the old chestnut tree? I hope they do; for one is not happy when he forgets his childhood and the scenes of childhood's days.

We go on up the hill slowly and admiringly. The trees crowd in upon us and the way grows narrower. At one place the driver stops and bids us look back down the road to the valley below and the blue hills far beyond. The view was beautiful;

even the driver's soul was touched by its beauty; and the little child on the seat beside me clapped her hands in ecstacy, then gazed in open-eyed wonder. Naturalist, child and driver all felt heart thrills as they drank in the beauty and restfulness of the scene. All are poets more or less; only the proper stimulus is needed.

Soon the lake was reached and, after a clean and wholesome dinner, which the good housewife soon prepared for us, we wended our way across the little meadow and down to the lake.

Lake Mashipacong is a pretty little body of water nestling among low hills and covering about 100 acres. The shores rise well but gently everywhere except at the head and at the outlet. They are, in most places, well covered with a heavy growth of chestnut, maple, alder, oaks, sassafras, etc. The shores, except at the upper and lower ends, are dry and admirably suited for cottage locations. At the head of the lake is a large cranberry marsh in which I spent most pleasantly an entire afternoon, so many interesting things did it contain. Great beds of soft, yielding sphagnum moss in which one sinks to his knees; ozier willows, buttonbushes and other small, bushy shrubs here and there; isolated pitcher plants resting on the sphagnum, the bright green and purple of their leaves contrasting pleasingly with the pale or bleached green of the sphagnum; and then a multitude of little cranberry bushes scattered profusely everywhere, their vari-colored berries resting lightly on the soft sphagnum bed. Bright red, blood red, wine-colored, purplish, and waxy or creamy white, with red and purple spots and blotches, they were; jewels in a setting of modest green. And what quantities there were of them!

The immediate shores of Lake Mashipacong are in many places somewhat rocky but low and easily accessible. In the shallow water near shore are some large boulders, gravel and slabs of sandstone; and patches of water-shield and white water lily grow here and there. Near the head of the lake the fragrant, waxy water lilies were still blooming.

Many soundings were taken and the depth of the lake was determined. One line was run the long way of the lake and as nearly through the middle as possible. A sounding was taken every five oar-strokes, which gave 27 soundings. The depth was found to be uniformly 12 to 15 feet. The greatest depth was at the 12th, 13th and 14th soundings from the South end. Another line was run nearer the West side and 18 stations were made, the greatest depth found being 14½ feet and the least 12 feet. Of the 45 soundings taken, one was at 11 feet, 13 were at 12 feet, 10 were at 13 feet, 17 were at 14 feet, one was at 14½ feet, and three were at 15 feet. It thus appears that the depth is remarkably uniform. The bottom in all the deeper parts is of soft mud or decaying vegetation.

October first, at 4 P. M., when the temperature of the air was 66°, that of the surface of the water was 64° and that of the bottom, at a depth of 10 feet, was 62°. At another station the surface temperature was 64° and the bottom, in 12 feet, 62.5°.

Animal life in Lake Mashipacong is abundant. Fish food is there in great profusion and the lake can support a great number of such game and food fishes as the large-mouth black bass, pickerel and pike. Some collecting was done and the following species of fishes were found to inhabit the lake:

1. Common bullhead, *Ameiurus nebulosus*. Quite common.

2. White sucker, *Catostomus commersonii*. Said to be common.

3. Chub sucker, *Erimyzon sucetta*. Several young examples obtained.

4. Roach, *Abramis crysolencas*. Quite common and excellent food for bass.

5. Common eel, *Anguilla chrysypa*. Said to be common at times.

6. Banded pickerel, *Lucius americanus*.

7. Common Eastern pickerel, *Lucius reticulatus*.

Both of these pickerels seem to be quite common and to reach a good size, the latter often weighing 4 pounds or more. Those usually caught run from ½ pound to 2 or 3 pounds. Both are excellent game fish and delicious food when fried or baked. These 2 species may be readily distinguished. The banded pickerel has usually 12 (11 to 13) branchiostegal rays, 11 or 12 rays in the dorsal, and 11 or 12 rays in the anal; while the common Eastern pickerel has 14 to 16 branchiostegal rays, 14 dorsal and 13 anal rays. In the former the color is dark green, the side with about 20 distinct curved blackish bars; while the latter is greenish, with many dark curved lines and streaks, mostly horizontal and always more or less reticulated, hence the specific name.

8. Common sunfish or bluegill, *Lepomis pallidus*. Common.

9. Large-mouth black bass, *Micropterus salmoides*. A small plant of this important game fish was made in this lake some time ago. The lake is splendidly adapted to this species and it will no doubt thrive well in it.

The following species of mollusks were collected in the lake:

Anodonta cataracta, *Planorbis campanulatus*, *Limnæa catascopium*, *Sphærium rhomboideum*, and *Sphærium striatinum*. The first is a fresh water mussel or clam, the second and third are small snails, and the other 2 are small bivalve shells.

Apparently the most abundant animal in the lake is the little newt, or eft, *Diemictylus viridescens*, which in the fall literally swarms everywhere in the shallow water along the shores. They were seen everywhere and hundreds of them were collected. This little salamander lives only for a portion of its existence in the water, the rest of its life being spent on the land. It does no harm in any way, but doubtless serves to some extent as food for carnivorous fishes.

CONCERNING THE NORTH DAKOTA HERD.

I see from the December number of Recreation that an attorney of New York has been found so hard up for a job as to take up the case of those game hogs referred to on page 360 of November Recreation. I think he should be glad to settle it out of court, for any decent attorney would be ashamed to take it into court; but if he does have a trial, your 32,000 loyal subscribers, of whom I am one, will contribute enough to fight a dozen such cases.

What gentleman would want or should catch more than a dozen such bass in a day! What could he do with them? Nothing but make a holy show of himself. He should have left the greater number of those fish in the lake, to propagate for future use. It is like such men to try to hide behind the position they hold in that county by the suffrages of decent people.

Hundreds of beautiful lakes all over the Northern part of our grand old State of Ohio have been depleted by just such swine, so we are compelled to go hundreds of miles North or East to get any good fishing. Keep right after the fish and game hogs, Brother Shields, and every true, loyal gentleman sportsman in America will applaud your action and give you financial aid.

A. G. W., Toledo, Ohio.

You have sized up correctly the fish hogs whose pictures appear in November Recreation, on page 360. They are of the kind we soldiers used to hunt in Arkansas, the razor back, long snoot kind. It was a case of necessity; we had to have meat, such as it was. The devils in this North Dakota herd ought to run them into the deep blue sea. I see one of them is of my profession. I am sorry for that, and until he so lustily squealed I had hoped he was an unlucky dog Tray in bad company. His picture certainly makes him look as though he ought to "go 'way back and set down."

T. M. Pierce, Bozeman, Mont.

I take it that the readers of Recreation will return a verict at once and "without leaving their seats," that the herd of swine found on page 360 of November Recreation have not been, and could not be, libelled. The English language does not embrace libellous words when applied to such wretches. Thanks to the photograph, we need not speculate, and Attorney Guthrie need not speculate, as to whether it is a lie or not. We believe our own eyes, and he ought not to deceive himself. I like to hear them squeal.

Henry A. Morgan, Albert Lea, Minn.
N. B.—This is not confidential.

I am glad you handle the game and fish hogs, market hunters and game butchers with gloves off. I do not think you need give yourself any uneasiness about the clients of Mr. Ledru Guthrie ever bringing suit against you for the scalding you have given them. Such men have not the nerve to meet you in court. You have my support in this matter as well as that of every other true sportsman. I hope you and Recreation may live years yet, if for no other reason than to show up such would-be sportsmen to the world in their true light.

C. F. Dill, Greenville, S. C.

My judgment on the picture in November Recreation, page 360, is that the 6 swine were let off too easily. There should be a law to prohibit any one of them from having in possession any firearm, rod, reel, line or any other contrivance that can be used to kill or take any animal, bird, or fish; or to have in possession any animal, bird, fish or part thereof, under a penalty of $1,000 and 10 years in State's prison, with the penalty to be doubled at every offence.

L. A. S. 2511, Fishkill Plains, N. Y.

When the November number of Recreation came my wife looked at the picture on page 360, and said, "They ought to be roasted for being fish hogs." That expressed her opinion of the 6 alleged men. For 6 men to take 500 fish in half a day is cold blooded slaughter. If all other men would do as those 6 did there would not be one little shiner left in one year, to say nothing about pike. A coat of tar and feathers applied to those 6 men in the public square at midday would be a good example.

C. N. Truman, Ouray, Colo.

In my opinion you have not libelled the North Dakota herd. The English language does not contain words sufficiently strong to express the contempt in which such porcine bipeds should be held. You have the constitutional right to demand a trial by a jury of your peers. As you are a true sportsman, demand a jury of sportsmen, and you need have no fear of the result.

C. E. Oliver, Portland, Oregon.

Concerning the North Dakota herd, it seems to me the judge and his lawyer friend, with their threatened lawsuit, are barking up the wrong tree. I can count about 250 fish in the illustration, and there could easily be as many more in the strings which do not show in the cut. At all events, it is a most hoggish exhibition, and well deserves the exposure given it.

J. W. Kerlin, Harrisburg, Pa.

In regard to the picture and comments on page 360 of November RECREATION, I believe you there express the sentiments of every true sportsman in the land.

One can not help smiling at the vulgar taste evidenced by that picture.

B. S. White, L. A. S. 7520,
Morgantown, W. Va.

The men shown on page 360 of the November issue of RECREATION should have been strung up instead of the fish. You were perfectly right in saying what you did, my only regret being that you didn't say enough.

Geo. M. Ockford, Jr., Ridgewood, N. J.

CUBAN FISH.

One fine morning 2 others and I sailed out from Tunas de Zaza, on the South coast, in a little sailboat, to try the fishing. We made for an island, Cayo,blanco, 4 miles out. We anchored just inside one corner of the island for protection from the sea swells. Fish were caught rapidly; we had enough in 40 minutes to satisfy us, mostly sea bass. However, it takes skill to pull in a fish under the conditions forced on one in Cuba. The hooks are always too large for the fish one usually finds. Again, the bait that the fish take best is the ordinary small shrimp, and these are so soft that a nibble will tear them off. Hence it comes down to knack of pulling strongly at the right fraction of a second to hook the fish. We landed on the island and took a short tramp, picking up a few star fish and conch shells; then started on our return. The wind died out and we killed time by looking at our catch. We discovered that every bass had what the natives call a sea cockroach in its mouth. The other species of fish were not so burdened. This parasite apparently gets in the fish's mouth when small, and grows as the fish grows, in some instances becoming so large as to fill the mouth entirely.

The sea cockroach has 6 legs. It hooks these in the gills of the fish, its head toward the front, and clings so firmly that it can be removed only with force.

The local fishermen catch the large sea sucker by stretching a net along a rocky shore, 100 to 150 feet out. Then they row up and down several times, near the edge of the bank, slapping the surface of the water with flat boards. The fish dart out and run into the net. This is done just after dusk or in the moonlight. I call these fish suckers, for they resemble the fresh water sucker, only they are larger. They weigh 8 to 12 pounds, and will not bite on a hook. A larger fish, 2 to 2½ feet long, is called sabana. Its sides are slivery white, the back being darker. The sabana will not take the hook either, as a rule, but plays around a dock or a boat waiting for scraps of bait. It is good sport to feed them and lead them near enough to spear; but they are strong and will frequently break away, leaving only a few scales on the prongs.

Courtland Nixon, 1st Lt. 2d Inf.,
Sancti Spiritus, Cuba.

NIBBLES.

Joe Eaton of Beatrice, Neb., was arrested in December last by Game Warden Geo. Maxfield with 36 fish in his possession which had been caught illegally. Eaton was taken before Judge Ingman of Beatrice, where he was convicted of violating the State law. The judge gave him 30 days in jail to think the matter over. If Joe could have had his fish to eat while in jail he would have had plenty of time to pick the bones out of them, but he probably was not so well fed there as he had hoped to be at home.

There is fine salmon trout fishing in Okanagon lake. Trolling is the method usually employed, though I have fished successfully with rod and line from rocks overhanging deep water. Fish are occasionally taken weighing 15 to 25 pounds. The last time I was trolling I caught 3 large ones in 2 hours, and could have secured more had I desired to. There seems to be no close season for fish in Okanagon.

Alexander Crawford,
Okanagon Mission, B. C.

J. D. Levy, a fish dealer, and John Hubert, a restaurant keeper, both of Butte City, Mont., were arrested by State Game Warden W. F. Scott on a charge of selling and serving trout in violation of the laws. They were convicted by Justice Olson, Hubert being fined $25 and Levy $50; and thus the good work goes on.

Will some reader of RECREATION tell me where I can find reasonably good fishing within 100 miles of this place?

H. C. Wurtsbaugh, Richwood, Ohio.

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

INFORMATION FOR MR. INGALLS AND OTHERS.

Replying to the inquiries of L. O. Ingalls, would say that for a load for foxes I advise him to find out by a series of tests what sizes of coarse shot his gun will shoot best. A gun sometimes handles one size much better than another. Then by testing different proportions of powder and shot he can decide which is most suitable in pattern and penetration.

I once owned a gun which seemed especially adapted to No. 3 shot, and when hunting anything that required coarse shot I used that in preference to either Nos. 5, 4 or 2.

I never saw the 32-40 soft point bullets used, but as soft nosed bullets require a high velocity to mushroom perfectly, I do not think they would do so as readily as one cast with a split joint, such as is recommended by the Ideal Manufacturing Co. Close the mould on a narrow strip of paper and pour in the lead. The paper may be half as wide as the length of the bullet if desired; but set it back a little from the point so the split will not reach quite to the end, thus holding the point together until it is opened by striking some object.

For loading buckshot I have tried every plan I ever heard of. Dipping them in beeswax is unsatisfactory, as there is no certainty about when they will separate. I have seen smaller shot carry 80 yards when waxed, and go through a board like a bullet. Besides, the wax fouls the gun to a great extent.

Wire cartridges are good but the cases are expensive, and do not always open at the same distance. I have made cases by rolling tough paper around a stick, gluing a wad in the front end and folding the paper together at the back; but they also are uncertain. The most satisfactory way I know of is this: Select a size of shot that will chamber loosely in the muzzle of the gun. Some of the larger sizes will take 3 in a triangular layer. Of smaller buckshot you can select a size that will take one in the center and 4 or 5 around it, leaving a little room so they will not clog in the muzzle. When loading shells put in a layer of buckshot and fill the spaces with No. 10 or No. 12 shot, then another layer of buck, and so on. It is surprising how close the fine shot will hold the buckshot together.

Smokeless powder does not ignite so readily as black, as may be seen from the necessity of using such powerful primers. A strong crimp is necessary, to hold the shot a small fraction of a second, until combustion is thoroughly under way.

I was rather surprised to see the statement by some of Recreation's readers that a .303 Savage would outshoot a 30-40 Winchester, or, as some say, "any gun on earth." The penetration of a 30-40 is given as 58 boards, ⅞ inch thick, against 33 for the Savage.

I have shot a Winchester 30-40 against a Savage .303 for penetration, both guns using soft point bullets, and the Winchester was the winner. As for a .303 outshooting "any gun on earth," it does not seem reasonable that a .303 bullet, with a velocity of less than 2,000 feet a second, should be more effective than a 40 caliber, with a velocity of 2,500 feet a second.

I have made many experiments with bullets; one of them resulted rather disastrously. About 4 years ago a writer in Recreation told about making explosive bullets by placing a 22 caliber cartridge in a mould so that the base of the cartridge would be at the point of the bullet, and casting the lead around it. He said it could be done with safety. First I tried several cartridges in the stove, and as they did not explode for some time I thought the scheme was all right, so placed one in the mould and poured in the lead. After I had picked the melted lead out of my hair, skin and eyebrows, and straightened up the cutoff of the mould, I wondered if I was the only idiot in the business. It was surprising how that little 22 scattered things.

E. L. Stevenson, Honolulu, H. I.

I advise D. F. N., Los Angeles, Cal., not to file down a notch to make a single trigger pull easily. Instead, take the hammer to a tinner and have him fill the too deep notch with solder. That can be done without drawing the temper of the hammer. Then with a knife cut away the solder to the depth you want the notch. If you attempt to file you remove the tempered surface, and the new surface, being soft, soon wears away.

In reply to L. O. Ingals, West Durham, N. Y., for a 12 gauge a good fox load is 3 drams ducking powder, No. 4, or its equivalent in nitro, with good double felt wads; 1 ounce No. 4 shot, and 1 black edge wad. The 32-40 soft nose is effective on deer. The best way I have ever loaded buckshot is as follows: Powder to suit, and buckshot that chamber loosely in muzzle of gun. If 3 chamber, place them as near center of shell as possible and cover with enough No. 10 soft shot to fill all spaces. Put in 3 more and cover with 10's. Two layers are enough. The fine soft shot are merely to hold the others in place. This load will give uniform results if good powder is used, also good penetration. Stubbs, Orwell, O.

Mr. Ingalls, of New York, wishes to know how to load buck shot for close, even pattern. Load powder and wad as for fine shot. See that the buck shot chambers loosely in shell. Then run shell full of melted tallow around the shot. Put on shot wad before the tallow cools. This gives an extremely close pattern, and is the load that was used by Sauntag and Evans in their hold-up at Fresno, Cal.
Chas. Latham, Dailey, Colo.

THE SAME OLD TROUBLE.

San Francisco, Cal.

Editor RECREATION:

The last day of June, 1887, I left San Francisco on the evening train, and after 30 miles of railroad travel I was met at the station and driven into the foothills. There we had a cabin that we used as headquarters during the open season for deer, which was then July 1st to October 15th.

The next morning, long before daylight, we were up, and, after a hasty breakfast, each of us took a different course for our day's hunt. My way led up a long ridge, to some 500 acres of comparatively clear, rolling country surrounded by thick brush, which was a great place for deer. By the time I had reached this clearing, the sun was just coming up, and it was getting almost too late to find the bucks feeding. Nevertheless, I walked on and followed around the edge of the clearing, intently watching for signs of deer. I had gone but a short distance when a big doe jumped from behind a bunch of brush, 30 feet away. I bleated and she stopped short and looked at me, not over 25 yards from me. How hard I strained my eyes, looking for horns! There were none, so I contented myself by pointing my .44-40 Marlin at her and thinking where I should plug her if she were a buck.

Within the next hour I saw no less than 7 does and fawns, but nary a buck. My attention was finally attracted to a track in the trail which I knew at once was made by a monster buck. I decided to try for him when he should come out to feed at night. I crossed the ridge to the big spring, and spent the rest of the day dozing in the shade of an oak that spread its limbs over the spring.

About 5:30 P. M. I started out again with the intention of getting Mr. Buck. I walked slowly and carefully back along the trail, stopping at each clump of bushes and looking carefully ahead before going on to the next bush. I had passed the place where I saw the track in the morning, and as I looked again my heart missed a beat, for there, not more than 30 yards away, was a monster buck, looking right at me. He had seen me before I saw him, and I knew if I made a quick move it would be all off, as he was in such a position that one jump would take him out of sight. I gazed at him a few seconds, and then gradually sank to my knees, hoping to bring my rifle up to my shoulder at the same time without any sudden move; but the wary old cuss was suspicious, and with one jump he disappeared from view.

In an instant I made up my mind that if I could quickly reach the point where he had gone in I might see him cross a little twale I knew lay in the direction he had saken. I made a run for the trail, and as I reached the edge of the brush I saw him moving off slowly about 75 yards distant. A bleat from me stopped him an instant, and, as he looked back I held my breath to steady my gun, which owing to my rapid breathing, after my short run, was going around at a great rate. As I caught him just right, I let go and struck him in the shoulder, a little too far forward. The shot turned him completely around, and so bewildered him that he forgot his cunning, and instead of leaping to cover he staggered back down the same trail he had gone over.

Without taking the gun from my shoulder, I pumped down the lever to reload, but it didn't work. It failed to extract the empty shell and the next shell coming up jammed in the action. The big buck seemed dazed as he came toward me, getting closer and closer, until I could plainly see the blood pumping out of the wound in his shoulder. He was then only about 50 feet from me and still coming on. Of course, I got buck fever then, but not so badly but that I could curse the Marlin Arms Company, collectively and individually, the man that sold the gun and the man that made the cartridge.

I reached for my knife and tried to extract the shell and push the other one back so as to free the action. Anyone who has ever owned a Marlin rifle knows how I felt. By that time the buck had reached a cross trail which led up through a bed of ferns and under some bay trees. He staggered up this trail and out of sight under the drooping branches of the trees. I could see the bloody foam drop from his mouth, and the blood run down his foreleg. If I had had one more chance I could have stopped him, but my gun was as useless as a club.

As the deer disappeared under the trees I sat down on the ground and attacked the gun, resolving to get that shell out or break the gun. After several minutes' work, I succeeded in getting the shell out, and the gun to work again.

Crossing over to the spot where the buck had turned up the trail, I followed the broad trail of blood to where he had laid down and got up again. He had left the trail and broken blindly down hill through the brush. Then a pool of blood showed where he had stopped; and again as he went on the faint sign showed that a clot had stopped the flow, until he had stumbled over a log, and it had broken out afresh.

It was getting dusk and I stumbled on, expecting to come on him at any minute. As it grew darker it was harder to follow the track. At last in a dense growth it became so dark I had to give up. Tying my handkerchief on a tree so I could pick up the track in the morning, I made my way back to camp, which I reached about 10 o'clock.

The next morning we returned to the spot where I had given up the track the night before, and spent 3 or 4 hours hunting for the deer, but it was of no use. He had either got entirely away or had died in some place where we could not find him.

I still have the .44-40 Marlin, for I have never found anyone for whom I have such a dislike that I would give it to him. It stands in my gun case, while a .38-55 Winchester takes its place when I am after game. E. A. Greene.

DEFENDS KRAG-JORGENSEN.

In your May number I see that R. A. R., of Angelica, N. Y., is somewhat disturbed because the War Department is replacing the models '92 and '95 with the models '96 and '98 Krag-Jorgensen rifles, and calls this gun an inferior foreign arm. Permit me through your pages to enlighten him.

The Krag-Jorgensen rifle was adopted in 1892 after a series of competitive tests conducted by a board of army officers. All inventors and manufacturers were invited to submit rifles to the board. A great many were submitted and the tests were conducted with great care. The Krag-Jorgensen made the best showing in those tests; and consequently it was adopted, and its manufacture begun at the Government arsenal at Springfield, Mass. The rifle has since stood the tests of 2 wars in tropical climates, and no fault has been found with it by the men who have used it. I am familiar with the rifles in use by the principal armies of the world and am firmly convinced that our weapon is superior to any of them. As a result of 8 years' use some minor improvements have been suggested, and these are embodied in the '98 model. This gun is to all appearances the same as the model '92, except that the cut-off turns down instead of up, and some of the smaller parts have been straightened. The rifle is foreign only in the name of its inventors. Its official name is "The U. S. Magazine Rifle."

Its maximum range is 4,066 yards, initial velocity 2,000 feet a second. Its accuracy is unquestioned. Even with the plain, open sights, without wind-gauge or correction for drift, our soldiers have made scores on the range that could not be made with the old Springfield, although equipped with peep sights, automatic correction for drift, and wind gauge. A wind gauge sight is now being issued, and we expect some remarkable scores will result from its use.

As a sample of the accuracy of this U. S. magazine rifle I quote the following from the Army and Navy Journal, "Capt. S. S. Stebbins, of the Twelfth New York, in 15 consecutive shots at Creedmoor scored 74 points out of a possible 75 at 500 yards with the Krag-Jorgensen rifle. This speaks well for the arm; also for the man using it, Captain Stebbins having only lately taken up practice with the Krag."

I recommend that R. A. R. procure the report of the Chief of Ordnance, U. S. Army, for 1892 and read the description of the rifles and the tests to which they were submitted. C. E. Stodter,

1st Lieut., 9th U. S. Cavalry,
Guinobatan, Aloay, P. I.

THEY STILL ADVISE PETERS.

Baltimore, Md.

Mr. J. H. McKibben, Secy.
Peters Cartridge Co., Cincinnati, Ohio:

Dear Sir:—I read with surprise and regret in the May issue of RECREATION that you have withdrawn your ad. from this magazine on account of offence taken at one of their correspondents. I have been a user of Peters shells a number of years; in fact, I use no other, as I consider them superior to any for sure fire, accuracy and penetration. When anyone finds fault with them I always defend the shells and question the gun being warm or the springs weak.

RECREATION is one of the finest magazines of its kind published and is doing a great work in its field. I can not help thinking you are doing it and its editor an injustice in withdrawing your advertisement. I write you this not to criticise your business methods, but as a friend of both Peters cartridges and RECREATION. I sincerely hope you will reconsider your determination to withdraw your advertisement, as you have enough defenders to more than down any adverse criticism.

Yours truly, J. C. S.

Watertown, N. Y.

Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs—Seeing you have taken your ad from RECREATION, I take the liberty of writing you. You have made a great mistake, as your ad reached many sportsmen. I have used your ammunition for some time and always found everything satisfactory. Sincerely hoping you will see your mistake, I am, Very respectfully,

C. E. Van Order.

VARIOUS WINCHESTER MODELS.

I have used rifles since 1885, mostly Winchesters. Two years' experience with a model '86, 45-90-300 Winchester convinced me that I did not want it. It would put, on lucky days, 2 shots out of 10 in a bull's eye at 150 yards, with a rest. It made more noise and kicked harder than a 10 bore, and whatever part of a deer you hit with it, it was sure to spoil one-third of the meat.

While using a 40-82-260, model '86, I narrowly escaped a serious accident. I reload my shells, and in one I put what I supposed was 12 grains of smokeless powder. I was using an 82 grain measure with a wad pushed into it far enough to limit its capacity to 12 grains. The wad had slipped down to the 50 grain mark, and I put that amount of powder in one unlucky shell. I shot it at the 100 yard target. The gun kicked like a mule, the bullet spread over the target like bird shot, and the barrel and receiver were so swelled and wrenched as to be useless. Why it failed to burst is a mystery.

My present gun is a 38-72-233 box magazine Winchester, which I use with metal patched mushroom bullet and 27 grains Du Pont No. 1 smokeless. It has flat trajectory, plenty of smashing power, is accurate and light. In my opinion there is no better all around gun. G. W. Chambers,

Marion, Ind.

TO AVOID RUST.

Seeing several inquiries for a good gun grease and an approved method of protecting a gun from rust, I submit this:

Sperm oil is good and will not gum; but being thin, neither will it keep its place long. It runs down, leaving upper parts of barrel exposed. Winchester gun grease is apparently oil, perhaps sperm oil, thickened with Japan wax. It will stay where you put it, and so is pre-eminently the stuff.

Clean your gun and, being sure it is dry, oil freely with Winchester gun grease. Have a cartridge or an empty shell in breech and place a cork tightly in muzzle. It is then safe for a long time.

If you are going to Europe and don't expect to come back for 10 years, tear a strip off an old blanket or other thick woolen cloth. Tie or sew a cord to one end, fasten a lead weight to the other end of cord, saturate the strip with the grease, drop weight through barrel and draw the strip into bore, filling it tightly. Then if you lock up your gun so the children can not pull the rag out, you have the cinch on it.

I got this idea from a back number of RECREATION.

Moral: If you don't know what you want to know consult your back numbers of RECREATION.

Geo. Walker, Parkman, Wyo.

SMALL SHOT.

About how many thousand shots, with metal jacketed bullets, will the Savage rifle stand before becoming inaccurate from wear? Will it wear as long as a 45-90? Is the Savage effective at 1,000 yards? What is its penetration at that distance?

S. H. Freeman, Nordhoff, Cal.

ANSWER.

I do not know the exact life of a Savage rifle barrel. I have seen a rifle that has been fired over 7,000 times. The sharp edges of the rifling show a little wear, but not enough to affect the accuracy or penetration of the arm. With reasonable care in cleaning, the Savage rifle barrel will last longer than the 45-90. Savage smokeless powder should be used, as it contains nothing injurious to the barrel steel. Smokeless powder that contains nitro glycerine will shorten the life of a barrel materially. The smashing power of the .303 Savage expanding bullet at a distance of 1,000 yards is sufficient to kill moose, bear, caribou, etc. The penetration is 23 to 25 inches in clear pine at that distance.—EDITOR.

I have owned and used a Stevens No. 45 Ideal 25-25 the last 3 years. For an all around gun to kill anything from a squirrel to a deer there is none better. I have all the Ideal tools and can make any weight bullet from 46 to 106 grains. For small game I use the 46 grain bullet with 3 grains DuPont smokeless rifle No. 1. For deer I use the 86 grain bullet with 8 or 9 grains of the same powder. With one side of my belt filled with the small loads and the other with the large, I am always ready for anything. I have killed deer at 200 yards with the large load. Have also killed 2 deer with the small load at 75 yards. However, I would not advise any but a good shot to hunt deer with a 25-25. The greatest sport I have is shooting rabbits and grouse. There is no law against killing rabbits and the more one kills the better it is for the ranchmen. I can reload my shells at less than the cost of 22 shorts. I should like other readers of RECREATION to give their experience with the 25-25. I. A., Buena Vista, Colo.

I am a strong friend of the 30 caliber as an all around gun. I reload my own cartridges for short and medium range, and can recommend the following: For squirrels, rabbits, etc., 8 grains Du Pont No. 1

rifle powder and 100 grain alloy bullet, 10 parts lead to 1 part tin, cast in Ideal mould 30810 and sized. Also 5 grains Du Pont smokeless shot gun powder with the same bullet. The latter does not hold up so well, but does good work at 50 yards or under. I would not advise larger loads of the shot gun powder, as they might prove dangerous.

For ranges from 100 to 300 yards I use 15 grains Du Pont No. 1 and Ideal bullet 3084, 152 grains, 1 to 10. It is a sure thing on woodchucks. I have never had any trouble in cleaning my gun, and use only vaseline as a rust preventive.

I prefer a 30-40 Winchester to any other make or caliber.

E. G. Rogers, Adrian, Mich.

I have been using the Savage .303 rifle and find it a powerful and accurate gun, but believe I now have a load that, for shock and smashing power, is superior to even the .303. Here it is: 12 gauge smokeless shell; 3½ drams Dupont smokeless; one 12 gauge cardboard wad; one 11½ gauge ⅜-inch white felt; one 12 gauge ⅛-inch black edge. I press the wads home firmly on the powder, but do not ram them. On the last wad I seat a 12 gauge lead ball, cast one part of tin to 10 of lead, over which is a thin linen patch well coated with mutton tallow. Crimp down tightly on the bullet, using no top wad. My gun is a Parker, with true cylinder, 30-inch barrels. Those who try this load should be sure the ball will go through the muzzle of the gun. I use regular shot gun sights, and can hit anything as big as a bucket nearly every time at 150 yards. Loaded with shot my gun does nicely on woodcock and quails. P. F. D., Greenville, Del.

Why is the 30-40 better than the 30-30? Can I get reloading tools for the 30-40? Does it shoot a short range cartridge? Does the 30-40 give more recoil than the 30-30? Will the 30-40 burn all the powder charge?

Eddover Willing,
Chesaning, Mich.

ANSWER.

The 30-40 is better than the 30-30 because it has 10 grains more powder, and thus the bullet has a higher velocity, lower trajectory and greater shocking and smashing force. You can get reloading tools for the 30-40 from either the Winchester Co. or the Ideal Mfg. Co. Yes, the Winchester Co. makes short range cartridges for this, as well as for its other rifles. The 30-40 cartridge gives slightly more recoil than the 30-30, but this is scarcely perceptible when shooting at game. With the standard length of barrel the 30-40 rifle will burn all the powder in the cartridge.—Editor.

I have used rifles the last 40 years; the muzzle loader up to 1885. I then got a Sharps 45 caliber. Both the above guns were as good as any man needs for hunting game in the mountains. In '98 I got a 30-40 single shot Winchester. It would not make a clean kill, as the lead would melt in the jacket. I sold it and got a Marlin 30-30. The breech action was a delusion, so I disposed of that gun. Later I bought a Savage octagon barrel, 303. It is perfection; I need look no farther for a smokeless rifle. Still, I would like it better if it were a single shot. I can use it as such, however. Savage rifles are not popular here; the magazine does not hold enough cartridges for a game hog. The man who will invent a gun that will hold 50 cartridges can make a fortune.

J. A. Steele, Walden, Colo.

I have a '97 model, take down Winchester repeating shot gun, which I would not exchange for any double gun. I have killed rabbits 80 yards away with it. With 3 drams of black powder and 1 ounce No. 3 shot I have killed ducks at the same distance. I have swore off on the double barrel after pulling both triggers at once and being kicked off an 8 foot fence on to my head. That can not happen with a repeater. I would say to G. H. Hurlbert that if he will get a '97 model Winchester, 12 gauge, 30 inch barrel, full choke, and put shot spreaders in his shells, he will find it an excellent gun for ducks. It will also do good work on quails and rabbits, and it is the best all around gun made. A 16 gauge is too small for wild fowl shooting.

E. C. DeWitt, Rocksprings, Ky.

I do not believe John Nordstrom, Gothenburg, Neb., or any other man ever owned a shot gun of any make or any gauge that would throw 62 pellets of No. 9 shot in a 3 x 3 inch target at 32 yards. Furthermore I dispute his story that his 16 gauge Ithaca gun threw in a 2 x 2-inch target at 25 yards, 92 shot out of one ounce of No. 6's. There are only about 280 pellets in an ounce; any man can figure for himself how hard some gun cranks try to dope the public. I have used many kinds of guns from the old muzzle loaders to the latest breech loaders. The best gun I have ever owned or used, considering shooting quality, wear, finish, and above all safety, was the Baker, either B or A grades.

L. W. W., Davis, W. Va.

I have been several years in Mexico, hunting and prospecting, and have had most of the guns of up-to-date manufacture. Am now shooting the smallest, finest, light weight rifle it has ever been my privilege to handle, a Stevens 22 long rifle Favorite No. 18. I need a small caliber gun to shoot quails, doves, rabbits, etc., for the pot. The Stevens is also good for squirrels when I am in the foothills, and for turkeys at 100 yards in the mountains. I of course carry other guns on my prospecting tours, a .303 Savage for bear and deer, and a Syracuse shot gun. With those 3 guns I think I have the best game battery on earth.

Sam. P. Willard,
San Luis Potosi, Mexico.

A few years ago I had opportunity to examine a strange weapon, which might be described as a cross between a rifle and a shot gun. It had a long, single barrel, fitted with a percussion lock. Its great peculiarity lay in its rifling. Instead of turning, as in modern rifles, the grooves ran straight from breech to muzzle. It came originally from either Norway or Sweden, and the owner claimed it would shoot both round ball and shot with greater force and accuracy than any smooth bore. I should like to know if other RECREATION readers have seen similar guns, and what they think of the claims made for such arms. A. Kennedy, Missoula, Mont.

We all know a 22 calibre mushroom bullet is much more effective on small game than the solid ball, but the bullet is too light to penerate far. I have often taken a 1-16-inch drill and mushroomed 22 long rifle bullets, and tested them on sparrows and woodchucks. The results were far beyond expectation. Sparrows seemingly explode when struck, and woodchucks drop in their tracks with their inner mechanism badly disorganized. If someone would make a 22 long rifle with mushroom bullet it would be more powerful than the 32 R. F. J. D. Snyder, Lowell, O.

Can someone give me the classification of shot gun smokeless powders; that is, whether they are gun cotton, nitro-glycerine or chlorate of potassium compounds? Do they produce a higher or lower temperature in combustion than does black powder? Do they start the shot from the breech quickly or gradually? Would not the Whitworth system of rifling work much better in high power rifles than does the French system, the only one now in use? The Whitworth is a hexagonal bore. I should think it would be more durable.

Leroy Foltz, Neponset, Ill.

I note occasional items in the gun and ammunition department of RECREATION relative to rare guns. A short time ago I found and bought one of Sharp's Old Reliable rifles, 40-70 caliber, 28 inch round barrel, pistol grip, stock and hammer style, which weighs 20 pounds. These are scarce and I prize it highly, considering it in its appearance and serviceable state a first class acquisition to my sporting outfit; for though using the small bore I am still an unconverted 45-70 disciple.

E. E. Stokes, New York City.

I would say to S. U. Watson that I am using round bullets of about 87 grains weight with 8 grains of powder in my 38-55 rifle with good results. I prefer a grooved bullet on account of lubrication, yet the round bullet is accurate at short range. I have used many round bullets for shooting sparrows, and for prairie chickens when in the West. I should like to hear of the comparative merits of the 25-21 and the 25 cartridges.

F. B. Barber, Colebrook, O.

I wish to say a few words in praise of the Batavia Leader hammerless shot gun, manufactured by the Baker Arms Co. I have owned and used an Ithaca, a Remington, a Lefever, and a take down Winchester repeater, but none of them equaled my Batavia Leader. It has been fully tested, and all who have tried it say it is an extra good gun. It is far the best gun of moderate price I ever used.

Everett Brown, Pleasant Grove, Ind.

H. F., St. Johnsbury, Vt., asks about 32-20 and 25-20 rifles. I have a 32-20 single shot Winchester and it will do good shooting. I have put a 115 grain bullet the entire length of a large gray squirrel without tearing it, there being only a small hole where it entered and left the body. The full factory charge does the best shooting for me. I hear good reports also from the 25 caliber.

Frank Bennett. Lowell, Mass.

In May RECREATION D. Waters, of Baltimore, Md., speaking of his 10 gauge Remington gun, says: "I stumbled on a U. M. C. No. 287 shell, 4½ drams powder, 4⅛ ounces of No. 7 shot, and it is an ideal load for my gun."

Will he please tell me where I can get a shell to hold such a load, and what powder will handle almost 8 times its weight of shot? C. H. D., Marysville, Mont.

Is there a soft point bullet made for the 25-20 Winchester S. S. cartridge?

G. A. Savage, Meredith, Kas.

Will someone tell me of a good rifle for rabbit and squirrel shooting?

P. B. M., Quaker Hill, Conn.

Is it a good plan to coat the barrels of a shot gun with vaseline?

C. G. Syracuse, N. Y.

NATURAL HISTORY.

When a bird or a wild animal is killed, that is the end of it. If photographed, it may still live and its educational and scientific value is multiplied indefinitely.

KILL OFF THE EAGLES.

In the conduct of RECREATION, as far as I have observed, consistency has been a leading jewel. In your November issue however, a bad break is noticed. You have always advocated the protection of game by all. Yet in the number mentioned, because a man shot a chicken thief belonging to a great game destroying species, you say he deserves 10 years imprisonment. I hardly believe you meant just that. Your better judgement would dictate that a man who did not shoot at a chicken thief of any sort, caught in the act, deserves reproof. You will find it hard to name a useful characteristic of the bird you defend; he lacks a single redeeming feature. He is a most cruel, crafty and rapacious game exterminator. Only sentimentalists of the most senseless sort can see any utility in the eagle. I hope you will continue to work for game protection and boom the L. A. S., but don't try to ride steeds going in opposite directions. Eagles and game, from deer down, are diametrically opposed to each other. Payson, Manchester, N. H.

I referred above letter to Mr. W. T. Hornaday, and Mr. A. K. Fisher, Assistant Biologist of the United States Biological Survey, with a request for an expression of their views on the question(?) it raises. Here is Mr. Hornaday's reply:

"Exterminate the American eagle as a measure of sportsmen's economy? Perish the thought. Refuse legal protection to him when his existence is threatened? How can any full-blooded, right-minded American citizen be so churlish? Surely your correspondent has written hastily, and without taking time for sober second thought.

The American eagle needs no defence from me. Whenever the time comes that he is really in need of legal protection, 5,000,000 able-bodied men, saying nothing of the women and children, will be ready to fight for him at the drop of a hat. Whenever he needs to call out his reserves, he will be the best protected bird on earth. Whether

"He clasps the crag with hooked hands,
Close to the sun in lonely lands,"

or roosts in the dead cypresses along Indian river, or drags his finny prey from the swirling waters of the Yukon, he is enshrined in the hearts of 73,000,000 free people, and not one out of every 100,000 of them grudges him his daily food.

If his requisitions on the flocks of American farmers ever become a mentionable financial burden, depend on it, means will be found to pay Old Baldy's board bill. As to game, there is not a bit of danger that any species ever will be exterminated, or even noticably thinned out by eagles. That charge may justly be dismissed on the ground of "no cause for action." I venture to assert that there is not in this Union a State or Territory whose taxpayers would not rather pay for the actual losses to stock and poultry than to have the American Eagle exterminated within its borders.

Foreigners often sneer at Americans because of their worship of the mighty dollar. If the white-headed eagle ever should be exterminated, or driven out of this country because he eats an occasional chicken, lamb or rabbit, we will merit and receive the scorn of the world. Even the poverty-stricken ryots and bazaar men of famine-racked India ungrudgingly share their scanty stores of grain with the monkeys, made sacred to them by tradition. Shall we do less by our national bird? Hardly,

Of late years a few iconoclasts have gone out of their way to write down and villify the character of *Haliaetus leucocephalus*, and in that way, possibly, they have earned from publishers various sums of money amounting in the aggregate to as much as $8. They have called him a thief, a coward, a liar, and no gentleman; and more than one diatribe has wound itself up with a blistering denunciation of the use of such a bird as a national emblem. Some have even set up the wild turkey as a claimant for the position of feathered color-bearer for this nation!

Now, all this would be saddening, but for one thing;—it is amusing. Even if there is here and there a citizen who does not appreciate our national bird, the position of that bird is as impregnable as the Atlantic ocean. Even outside our own country the whole world admires him, or fears him, which amounts to the same thing.

Your correspondent says, "Only sentimentalists of the most senseless sort can see any utility in the eagle." It is true that Old Baldy can not hoe corn, nor drive a team; but he does not need to do any unskilled labor, for he has a better job. He has been officially appointed to perch with outstretched wings over the doors of all our ambassadors, foreign ministers and consuls, bear on his breast the armorial shield of this great nation, and command the respect of the world. If that is not utility enough for one bird, then the American people are indeed hopeless sentimentalists.

Mr. Fisher replies as follows:

It is remarkable how prejudiced many sportsmen are in certain lines of thought, especially if we consider how many advantages they enjoy from opportunities of travel and association with fellow men which ought to make them unbiassed and broad minded. Without question, 10 years' imprisonment is a severe penalty to impose for thoughtlessly killing an eagle; nevertheless, the man who upsets the balance of nature by systematically killing the birds of prey is doing far more injury to the community at large than the one who robs a bank. The man who, through ignorance, shoots nighthawks or bullbats because they are supposed to kill his chickens is hardly less benighted than the one who kills the majority of hawks and owls for the same reason. Comparatively few of the rapacious birds molest poultry or game except in extreme cases, when their normal food is temporarily withheld on account of storm or other conditions. Even at such times the victims secured are usually sickly or crippled birds, which, owing to their disabilities are unable to escape, and their removal prevents the breeding stock from deteriorating. Usually it is those people who allow their poultry to shift for themselves or leave their herds unhoused that complain most of the inroads of predaceous birds and mammals, for the thrifty farmer who protects his poultry and sheep at night has no occasion for condemnation.

Many ranchmen realize the value of coyotes and birds of prey and will not allow them to be molested on their lands; consequently rabbits, ground squirrels, gophers, rats and mice are kept in check, and a full harvest is the result.

If the advocates of spring shooting would curb their unseasonable inclinations, and sportsmen at large would be satisfied with a reasonable bag there would be plenty of game for all, and it would not be necessary to lay the blame for the scarcity of game on the birds of prey.

BIRDS, BUGS AND BOYS.

Sidney, Ohio.

Editor RECREATION:

Prof. Bruner, in his "Plea for the Protection of Birds" in December RECREATION, like most bird lovers, is able to see but one side of the question. Those who have given the matter most careful investigation, are in great doubt as to birds being a help to agriculture and horticulture. Our Agricultural Department is now working on the theory that injurious insects can best be controlled and exterminated by insects that prey on them. It seems that birds are not fond of our most injurious insects, and it is feared they are too fond of those which are beneficial.

Prof. Bruner says, "Birds, like all other animals, feed on that food which is most readily obtained; hence, they destroy those insects which are most numerous, the injurious species." This is not true of either animals or birds. A rabbit will pass tons of grass or weeds to get to clover or peas, and will even choose certain varieties of young apple trees in preference to others in a nursery, after passing by the cherry, plum and peach trees. Chickens will chase grasshoppers many yards through a potato field where there are thousands of potato bugs, but never a potato bug will they eat. And it is so of every animal and bird. Prof. Bruner says 101 potato beetles have been found in the stomach of a single quail. I do not know who is authority for this statement, but I can not believe it.

A writer in a farmers' paper some years ago, condemned the killing of quails, and said he had seen a flock feeding on the potato bugs in his field, and that they would take a certain number of rows across the field, and repeat the operation until the field was cleaned of the bugs. He claimed too much, and simply lied. In "Birds of Village and Field," Florence A. Merriam tells a story of a quail getting into a locality in New York where quails were unknown, and when he whistled "Bob White" the dogs of the neighborhood ran thinking they were being called.

Those who write books should not believe all that is told them. If quails were not killed, and should breed at the rate she claims they do, there would be no room for anything else in a few years. She says they increase 20 to 90 fold a year. Now, if we count an increase of only 9 fold, or one brood of 18 to each pair a year, their progeny in 10 years would number 20,000,000,000. That number, packed like sardines, 100 to a cubic foot, would cover a farm of 10 acres 46 feet deep.

Our injurious insects are not relished by birds or poultry. As a rule they are unfit for food, even for a chicken, which will eat almost anything. Potato bugs, squash bugs, curculio, tomato and tobacco worms! Would any self-respecting bird eat anything so foul?

I have never succeeded in getting a chicken, young or old, to eat even a cabbage worm, though the birds were confined, and could get no other worms or bugs. Some years ago I kept 3 quails in a cage several months, and while they would eat grain and weed seeds, I never could get them even slightly interested in any kind of bug or worm

Prof. Bruner says: "The making of bird-egg collections is getting to be such a fad that almost every boy enters into it more or less zealously at some time or other. Some single collectors in a single season take 500 or more eggs." I do not for a moment wish to encourage boys in making collections of birds' eggs, but the above statement is an enormous exaggeration. I have been in close touch with boys for over 40 years, and never met but one boy who had started a collection of birds' eggs; and his was of the eggs of sea birds. His father was an eminent sportsman and statesman. E. P. Robinson.

ALARMING DECREASE OF BIRDS.

The Audubon Society of Missouri has been collecting data as to the protection of birds in that State for some months past. The methods adopted in this work are similar to those employed by Mr. W. T. Hornaday some years ago when he secured reports from all the States in the Union. The results obtained by the Missouri Audubon Society are much like those attending Mr. Hornaday's work. The conclusion arrived at from the investigation made by the Missouri bird lovers is to the effect that song and insectivorous birds have decreased in that State 62 per cent and game birds 80 per cent within the past 15 years. Deer, which were once plentiful throughout a great portion of Missouri, are practically extinct except in a few small and thinly settled districts. The Society asks, "Does any person doubt that unless sweeping reforms are inaugurated at once, a few years hence will witness the total annihilation of birds in this State?"

Here are some conclusions arrived at from a study of reports obtained from all parts of Missouri:

Bird life in general is being exterminated at an appalling rate.

Edible birds especially are persistently persecuted.

Song and insectivorous birds are killed for food on account of scarcity of game birds.

The extermination of all desirable birds is certain within a short period.

The very existence of the deer—the monarch of the woods, only a few years ago roaming in countless numbers through our forests—is doomed.

Bird and game laws as they now exist, and as now enforced, are entirely inadequate to prevent the annihilation of our birds and game.

A few suggestions:

Prohibit the killing, capture, possession or sale, dead or alive, of wild birds, except game birds and a few noxious species.

Prohibit the destruction of birds' nests or collection of eggs.

Prohibit the sale of all dead game at all seasons of the year, for a certain period.

There is no agency so well calculated to protect wild bird life as to prohibit its sale. The market hunter is robbed of his vocation, and the incentive to slaughter at all times of the year for commercial purposes is abolished. Experience has taught that this object is broad gauged and purely in the interest of the masses and in direct line with the unerring laws of nature—reproduction.

Restrict the number of game birds or game that may be taken or killed in one day or in a given time by a single individual.

Prohibit the shipment of game outside the State.

Prohibit the hunting of deer with dogs.

Repeal what is known as the county act.

No person should be denied the privilege of returning with the trophies of his chase, to enjoy same with his family at home.

Prohibit the using of a gun for hunting without a license.

The Audubon Societies throughout the country are doing a great deal of good and have aided in securing the passage of good game laws; but these people are not aggressive. They rarely prosecute a person for violating a game law. That remains for the League of American Sportsmen and is a large part of the work of this body. Therefore all friends of game protection, in Missouri as well as elsewhere, should belong to this League. All persons who realize that song and insectivorous birds and game birds are valuable to humanity, should belong to this League. All persons who can forsee the terrible destruction that would result to crops of all kinds, and to trees, if the song birds and game birds were all destroyed, should belong to this League. It has been effectually demonstrated by scientists that if all bird life were wiped off the face of the earth it would by reason of insect pests become uninhabitable within a few years. All persons who wish to see such a calamity averted should join the L. A. S. and aid in this great work.

Anyone desiring further information as to the causes and the results of the destruction of birds in Missouri should write for a copy of the report referred to.

Address August Reese, secy., 2516 N. 14th St., St. Louis, Mo.

METHOD OF PRESERVING BIRDS WITH PLUMAGE UNHURT.*

Take a bird just killed, open from the lower part of the breast bone to the vent with a sharp knife. Then extract all the contents, such as the intestines, liver, stomach, etc. This cavity then immediately fill with the following mixture: common salt, one pound; alum, powdered, 4 ounces; pepper, ground, 2 ounces; well mixed. Then bring the lips of the wound together by suture, so as to prevent the stuff from falling out. It would be well to put a small quantity of tow, on which the mixture has been sprinkled, along the suture previous to its being closed. The gullet, or passage, must then be filled from the bill to where the stomach lies, with the same mixture (but finer round, which must be got down by the help of a wire. Oepn the head near the root of the tongue, with the knife, and after having turned the knife around 2 or 3 times to destroy the structure of the brain, fill the cavity with the mixture. Then hang the bird up 2 days by the legs, in order that the salt may more effectually penetrate round the muscles and ligaments which connect the vertebræ of the neck. Then place the bird in a frame to dry in the same attitude we usually see it when alive. In this frame it must be held by 2 threads; one passing from the vent to the lower part of the back and the other through the eye. The ends of these threads are to brace up the bird to its natural attitude, and fasten to the beam of the frame above. Lastly the feet are to be fixed down with pins or small nails. In this situation it is to remain for a month or more, until the bird is perfectly dry) which may be readily known by its stiffness), when it may be taken out of the frame. The eyes must be replaced with glass beads fixed in with strong gum water.

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*Written by a bird collector in 1795.

THE MEANEST MAN ON EARTH.

The meanest man on earth lives here. Among his abundant possessions is a fine cherry tree. The red-headed woodpeckers love the cherries and the old man is too stingy to either divide with them or use good ammunition on them. He has, therefore, devised a plan by which he can kill them without expense. He secured a long pole and planted it firmly in the ground near the trunk of the tree, letting the top extend about 3 feet above the topmost branches. Then he took an ax and a chair, sat down by the pole and waited. All the woodpeckers that came to the tree would light first on the pole. Whenever one did so, the old cuss would spit on his hands and swat the pole with his ax. The poor bird would fall, its life knocked out by the shock. In that way this economical beast killed every redhead in the neighborhood. If there is a meaner man alive he ought to be lynched.

Ed. C. Hill, Horse Cave, Ky.

My attention was called by Dr. A. N. Sheffner to the query, "Do grouse drink?" I told the Doctor I would investigate, as I had frequently flushed grouse from my water tank. I find that grouse do drink. Their method of drinking is similar to that of the common barnyard fowl, namely, dipping down the head and filling the mouth, then raising the head and swallowing the water.

T. P. Aspinall, Hay Springs, Neb.

At Chamberlain, So. Dak., during a snowstorm the night of December 4th last, there fell a shower of birds. They were the little cow birds common on the prairie and looking much like English sparrows. The fall began about 10 p. m. The next morning there were thousands of dead birds all over the town and adjacent prairie. Fifty were counted on the roof of one building. Here and there a living bird was found, able to hop about but incapable of flying though apparently uninjured. How do you account for the fall of the birds and their death?

Reader, Volin, South Dakota.

ANSWER.

The birds were probably caught by the cold storm while in a famished condition, and were consequently unable to withstand the exposure.—Editor.

Kindly state through Recreation how to distinguish blacktail deer from mule deer. A. Morris, Florence, Mont.

ANSWER.

There are no blacktail deer in Montana. The blacktail is found only on the Western slope of the Cascade mountains, and in the coast range in Oregon, Washington and British Columbia. It is almost identical with the whitetail deer except that its tail is black on the outside. The mule deer is the mountain deer of Montana, so called because its ears are large and shaped somewhat like those of a mule; its tail is slightly black on the outside, but nothing like that of the true blacktail. The mule deer is called a blacktail by 9-10 of the people who speak of it.—Editor.

Mr. Wixson is right in saying that eels migrate. Six years ago the boys hauled $3,000 worth of eels from the bottom of South bay. These were found in beds in 20, 30 and even 40 feet of water, and were caught with eel spears lashed to long poles. All winter, as long as the ice would hold them, 60 to 100 men worked at eeling. Spears and poles were at a premium in those days. Since then but few eels have been taken in the bay.

A. D. Milford, Ont.

During December, 1901, 7 Arctic owls were killed in this vicinity. They are all being mounted by our local taxidermist. They present an attractive appearance. Is not such a flight of these birds an unusual occurrence? Yet consider the wanton destruction.

F. S. W., Elk Rapids, Mich.

In January Recreation, on page 20, the statement is made that the young woodcock flies when no larger than a bumble bee. If this be true, then, surely, "he runs with the shell on his head," if not all around him.

Robt. J. Sim, Jefferson, O

THE LEAGUE OF AMERICAN SPORTSMEN.

OFFICERS OF THE L. A. S.

President, G. O. Shields, 23 W. 24th St., New York.

1st Vice President, E. T. Seton, 80 West 40th St., New York.

2d Vice-President, W. T. Hornaday, 2969 Decatur Ave., Bedford Park, N. Y.

3d Vice-President, Dr. T. S. Palmer, Dept. of Agriculture, Washington, D. C.

4th Vice-President, A. A. Anderson, 6 East 38th St., New York.

5th Vice-President, Hon. W. A. Richards, General Land Office, Washington, D. C.

Secretary, A. F. Rice, 155 Pennington Ave., Passaic, N. J.

Treasurer, Austin Corbin, of the Corbin Banking Co., 192 Broadway, New York City.

FOURTH ANNUAL MEETING

Pursuant to announcement, the 4th annual meeting of the League of American Sportsmen was held at Indianapolis, Ind., February 12th. The following officers and delegates were present:

Hon. Frank L. Littleton, Chief Warden Indiana Division; J. W. Connor, Kalispell, Mont., Delegate Montana Division; J. M. Gaunt, Great Falls, Mont., Delegate Montana Division; H. A. Morgan, Albert Lea, Minn., Vice Warden Minnesota Division; Harry E. Lee, Chicago, Ill., Delegate Illinois Division; A. Whitehead, Denver, Colo., Chief Warden Colorado Division; A. J. Applegate, Wichita, Kan., Secretary Kansas Division; F. G. Miller, Defiance, Ohio, Delegate Ohio Division; W. M. Grant, Oklahoma City, Okla., Chief Warden Oklahoma Division; William Dutcher, New York City, N. Y., Delegate New York Division; W. E. Gleason, Cincinnati, Ohio, Chief Warden Ohio Division; F. A. Pontius, Seattle, Wash., Chief Warden Washington Division; Chas. Paine, Wichita, Kan., Delegate Kansas Division; J. J. Hildebrant, Logansport, Ind.. Vice Warden Indiana Division; W. L. Agnew, St. Paul, Minn., Delegate Minnesota Division.

In addition to the officers and delegates above mentioned, there was a large attendance of local members living in Indianapolis and other towns in Indiana. Deep interest and marked enthusiasm were manifested by all present. It was inspiring and gratifying to hear the splendid reports, made by the representatives of the League, from the various States, as to the effective work being done all over the country in the interest of game, fish and song bird protection. Public sentiment is growing in our favor at a rate never before attained. No man can possibly realize the great work this League is doing, without attending one of these annual meetings. It is a fact to be deplored that all friends of game protection can not do so. When we realize that 10 years ago there was scarcely a State in the Union that had a law prohibiting the shipment of game out of its limits, and that today 38 States have such laws, we can see that the wheels of progress are moving. When we realize that only a few years ago no State Legislature could be induced even to consider a bill to prohibit the sale of game, and that to-day 16 States do prohibit the sale of certain kinds of game, and that a number of States prohibit the sale of all kinds of game, at all times, we can form some idea as to the wonderful change in public sentiment in favor of the preservation of wild birds and animals. The days of the market hunter and the game dealer are numbered. And the League did it.

The following report was submitted by Arthur F. Rice, Secretary and Acting Treasurer:

Receipts: Memberships, renewals, badges, from February 14, 1901, to January 10, 1902, $4,605.08.

Disbursements, during same period: State divisions, rewards, stationery, postage, salaries, stenographers, and sundry expenses, $4,078.38.

Balance on hand January 10th, $526.70.

Arthur F. Rice,
Secretary and Acting Treasurer.

The following resolutions were adopted:

Whereas, the League of American Sportsmen was incorporated in the State of New York in February, 1898, and

Whereas, the laws of the State of New York require that the incorporators of all companies or associations incorporated under such laws shall hold an annual meeting at the beginning of each year, and elect officers for the government of such company or association, and

Whereas, on January 13, 1902, the incorporators of the League of American Sportsmen held an annual meeting in accordance with the said laws as above stated, and re-elected all the general officers thereof, with the exception of treasurer, to serve during the year 1902, and

Whereas, Austin Corbin was elected treasurer of said League, to serve during said year 1902, now, therefore,

Resolved, that the League of American Sportsmen, in annual meeting assembled, on this 12th day of February, 1902, does hereby approve and ratify the action of said incorporators in re-electing the general officers who served during 1901, and in electing Austin Corbin to serve as treasurer during said year 1902.

Almighty God, in his wisdom, has seen fit to take from us one of our truest and best friends and one of the most earnest workers in our great cause, and we deem it well to record our sorrow in so far as words can express it. Therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that in the death of Albert E. Pond, a charter member and Chief Warden of the New York Division, this League has lost one of its most devoted and faithful workers, and the birds and the wild animals have lost one of their best friends.

In paying to the memory of our departed brother this, our last tribute of respect, we tender to his bereaved family our sincere sympathy in their great loss. May he who noteth even the sparrow's fall send peace and consolation to the bereaved family of our lost comrade.

Offered by Mr. F. A. Pontius:

Alaska is the greatest game country remaining on this continent. It is the home of several species of our grandest American wild animals; yet they are being rapidly swept out of even that remote country. Miners, prospectors, market hunters and skin hunters, inspired by unprincipled fur dealers and taxidermists, have almost fixed the date when the last moose, the last caribou and the last mountain sheep in Alaska shall have followed their kinsmen into oblivion.

A bill is now pending in Congress which aims to stop this reckless slaughter; to stop the sale of game in Alaska, and the shipment of heads and skins from that Territory. Therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that we deeply deplore the reckless slaughter of our noble wild animals in Alaska and we earnestly beseech our Senators and Representatives in Congress to pass this bill at the earliest possible date.

This was offered by Mr. Harry E. Lee:

Whereas, the elk, which a few years ago was abundant throughout Colorado, Wyoming, Montana, Idaho, Oregon and Washington, has almost disappeared from these States, and

Whereas, the only large band remaining anywhere is that ranging in and about the Yellowstone National Park, and

Whereas, it has been effectually demonstrated that these great numbers of elk can not live in the Yellowstone Park, as now constituted, through the winter months, and

Whereas, these great bands of elk can not be afforded proper protection outside the legal limits of the Park, and

Whereas, all the best of the former elk range in the Jackson Hole country has been and is being fenced up by ranchmen, thus cutting off nearly all the former winter range of these elk, and

Whereas, these great bands of elk are threatened with starvation in the near future, therefore,

The League of American Sportsmen, in annual meeting assembled, representing all the States and Territories of the Union, requests and implores the Congress of the United States to immediately provide for the extension of the limits of the Yellowstone Park South and East, to include the adjacent timber reserves, and so much other country as may be necessary to provide an adequate winter range for the elk and the other wild animals in the Park.

The following was offered by Mr. Chas. Paine:

Whereas, game of all kinds is being rapidly exterminated in the United States, and

Whereas, State laws and State game wardens have been found incapable of preventing the complete extermination of many valuable species, and

Whereas, we believe the only possible means of saving the elk, the mountain sheep, the bear, the antelope and the mule deer from total annihilation within a few years is by the intervention of the general government, and

Whereas, certain of our good and wise chief magistrates have created several important timber reserves in the mountain ranges of the Western States, and

Whereas, a bill is now pending in Congress which aims to make absolute game preserves of certain of these timber reserves, therefore,

The League of American Sportsmen, in annual meeting assembled, does hereby petition and urge upon all members of Congress their favorable consideration of this measure; and we respectfully beseech these Senators and Congressmen to pass the same as soon as possible.

The present generation has seen the buffalo, the most noble and once the most numerous of all of our wild animals, wiped out of existence, with the exception of a few that were rescued from the passing throng by thoughtful men and that are now held and cared for in domestication. One of these small bands of buffaloes is owned by the heirs of Charles Allard, in the Flathead valley of Montana. Therefore:

The League of American Sportsmen, in annual meeting assembled, humbly petitions the Congress of the United States to take prompt and vigorous measures for the purchase and perpetual care of this band of buffaloes.

Mr. A. Whitehead offered the following:

All friends of game protection know that the buffalo in the Yellowstone National Park, which a few years ago numbered more than 400, have been killed off by poachers living near the borders of the Park, aided, abetted and inspired by unprincipled taxidermists, until now less than 30 of these noble animals remain in the Park; that this destruction has been wrought by these poachers because Congress has failed to appropriate a sufficient fund each year to employ an adequate number of scouts and game keepers to properly patrol the Park and keep the poachers out; therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that we deeply deplore this neglect of duty on the part of our Senators and Representatives in Congress, and we request and urge that body to appropriate hereafter at least $20,000 each year for the employment of scouts and game keepers in the Park, in order that the few remaining buffalo and the other game in the Park, may, if possible, be saved from the ravages of these skin hunters.

We also request and urge the Secretary of the Interior to adopt such measures as may be necessary to secure the detail of at least twice the number of troops heretofore kept in the Park to guard the roads and trails leading to and from same, in order to keep the poachers out of that great national game preserve.

Dr. T. S. Palmer offered this resolution:

Whereas, the prong horn antelope, one of the most interesting of America's wild animals, is threatened with speedy extermination, and

Whereas, several of the States having antelope left within their borders, have enacted laws prohibiting the killing of antelope at any time within long periods of years; therefore,

The League of American Sportsmen, in annual meeting assembled, representing all the States and Territories of the Union, hereby petitions and prays the Legislatures and the Governors of the States of Colorado, Idaho, Nebraska, Texas, Washington and Wyoming to enact, at the earliest possible moment, laws to prohibit the hunting or killing of antelope at any time before 1913.

And we especially urge all members of the League living in these States last named, to exert all possible personal influence to secure the enactment of such laws.

Mr. J. W. Connor, of Kalispell, Mont., offered this:

Whereas, The Cree Indians of British Columbia each year cross the International line into Montana and kill thousands of deer, elk and antelope, and

Whereas, the State officers of Montana have repeatedly urged the Indian department at Washington to take steps to prohibit these renegade Indians from coming across our borders and slaughtering our game as aforesaid, therefore,

Resolved, That the League of American Sportsmen urgently requests and prays that the Congress of the United States take such action as will meet the case, and as will forever prevent the yearly raids of these Indians on our game.

This resolution was offered by Mr. A. Whitehead of Colorado:

Whereas, it is the practice of certain Indians in Utah, Idaho, Wyoming, Colorado and other Western States and Territories, to leave their reservations and make periodical incursions into the adjacent country in pursuit of deer, elk and other game animals, and

Whereas, such hunting incursions result in great and unlawful destruction and waste of game in the places so visited, and

Whereas, it has been found difficult for the local authorities, and the Indian agents on the respective reservations, to prevent such hunting incursions, or to properly control the Indians when off their reservations on such hunting expeditions; therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that a rule should be adopted by the Indian Bureau, and rigidly enforced, absolutely prohibiting and preventing any and all Indians in any State or Territory West of the 87th meridian of longitude, from carrying firearms of any and every description, or having the same in possession when off the reservations to which such Indian or Indians belong; and the Honorable Commissioner of Indian Affairs is respectfully requested to see that a regulation embodying this plan be adopted and rigidly enforced.

Whereas, Virginia, Kentucky, Mississippi, Louisiana and Montana are the only States in the Union that have no laws prohibiting the export of game, Therefore:

The League of American Sportsmen, in annual meeting assembled, respectfully urges upon the legislatures and the Governors of such States, the necessity of enacting such laws at the earliest date possible; and League members in these States are hereby urged to use their influence to have such laws passed at the next session of their respective Legislatures.

The next resolution was offered by Mr. H. A. Morgan of Minnesota:

Whereas, the forests of this country

are being destroyed at an alarming rate by paper makers, and

Whereas, no good substitute for wood pulp has yet been found for the making of what are known as book and news papers, therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that we deem it the duty of the Congress of the United States to offer a reward of at least $200,000 to any person who may discover a good and practical method of making book and news paper from cornstalks, wheat straw, or any other annual vegetable product that can be successfully grown by farmers.

This was offered by Mr. F. S. Gleason:

Whereas, the Commercial Club of the City of Indianapolis has placed at the disposal of the League of American Sportsmen its assembly rooms for the purpose of holding the annual meeting of said League; therefore,

Resolved, by the League of American Sportsmen, that its thanks be and are hereby tendered the Commercial Club for the courtesy thus shown, and the Hon. Frank L. Littleton is hereby instructed to convey to the said Commercial Club a copy of this resolution.

Mr. H. A. Morgan offered the following by request of Mr. W. B. Mershon, of Saginaw, Mich., who was unable to attend the convention:

Whereas, the grayling, one of the gamiest, most interesting and beautiful fishes in the world, once abundant in many streams in Michigan, is now well nigh extinct; and

Whereas, enough of these fish still remain in the Manistee river to again stock that and other streams to repletion, if afforded proper protection, therefore,

Resolved, by the League of American Sportsmen, in annual meeting assembled, that we deem it expedient to stop all fishing in the Manistee river for a term of years, and that we humbly petition the Governor and the Legislature of the State of Michigan to enact a law at the next session of the said Legistalure, prohibiting any and all fishing in said Manistee river prior to June 1st, 1907.

The following message was sent by wire to President Roosevelt at Groton, Mass.:

Indianapolis, Ind., Feb. 11th, 1902.
Hon. Theodore Roosevelt, President U. S.,
Groton, Mass.

The League of American Sportsmen, in annual meeting assembled, extends its hearty sympathy to you, an honored fellow member, in your present grief, and earnestly hopes your son may soon recover.

To which this answer came promptly:

Groton, Mass., Feb. 11, '02.
G. O. Shields, President
League of American Sportsmen,
Indianapolis, Ind.

The very kind message of the League of American Sportsmen is warmly appreciated by the President. Young Roosevelt's condition tonight is considerably more favorable than at this hour yesterday.

Geo. B. Cortelyou, Sec.

FOURTH ANNUAL REPORT OF THE PRESIDENT.

A vast amount of good work has been done by the League during the past year, as will be shown by the reports of the chief wardens made at the annual meeting, which will be printed in the official organ during the spring and summer.

Among the most important achievements of the year has been the securing of the passage of bills in New Mexico, Arizona, North and South Dakota, Montana, Nevada and Idaho, prohibiting the killing of antelope at any time for periods of 5 to 10 years. Unfortunately, the Governor of Idaho vetoed our bill, but the Governors of the other 7 States approved them. The antelope is one of the most distinctively American, and one of the most interesting and beautiful of all our wild animals; and the fact that we have stopped the killing of these interesting creatures in 7 States where a few of them still remain, would be glory enough for one year even if we had done nothing else. But this is only one of the great things we have accomplished. We have secured the passage of laws in a dozen different States prohibiting the sale of all kinds of game at all times of the year. We have secured the passage of laws in a number of States prohibiting the exporting of game of all kinds. This would be glory enough if we had done nothing else. But we have done a great deal more.

League officers and members have caused the arrest of 667 men for violations of the game and fish laws, and the conviction of 582. All those convicted have either paid fines or gone to jail to serve them out. In many cases guns, ammunition and camp outfits, found in possession of lawbreakers, have been confiscated and sold, and the proceeds applied to State funds for the enforcement of game and fish laws.

Within the past year the League has paid 16 rewards of $10 each for convictions secured by its members. The members who secured the other convictions have not claimed rewards. We have distributed at least 2 tons of printed matter prepared in the interest of game, fish and forestry protection. We have sent out 5,000 cloth posters, offering rewards of $10 each for the conviction of game or fish law violators. In nearly all cases we have reports from the members to whom these posters were sent to the effect that same had been put up where they would do the most good. In some hundreds of instances, we have heard that lawbreakers had seen the posters staring them in the face, had been intimidated thereby and had announced their conclusion that it was time to quit taking chances by breaking laws and running up against League wardens. In many other instances, we have heard that malicious pot hunters and game hogs had torn down our posters, and that our members had promptly put up others in their places.

The League has been largely instrumental in breaking up the millinery traffic in the plumage of song and insectivorous birds. A number of States have passed laws prohibiting the selling, wearing or having in possession of such plumage for commercial or decorative purposes, and public sentiment against the custom of wearing bird skins has grown to such an extent that today it is a rare thing to see a woman wearing a bird on her hat, whereas, 2 years ago,nearly all women wore them. The Audubon societies have been valuable co-workers with the League in this field, but the League set the pace. It secured the passage of the Lacey bird law, and so is entitled to the greater credit for this reform.

League officers have made 2 important arrests of employees of the Armour Packing Co. for violations of the game laws in 2 different States. Convictions have been secured, and the company has been compelled to pay heavy fines. These are among the most important of the League's victories for the year. It is all right to arrest a poor farmer or other laboring man, and make him pay $25 for breaking a game law, but it is entirely another thing to round up a great corporation, worth millions of dollars, to make it pay a heavy fine, and to show its officers and the world that even millionaires can not override the game laws of the country with impunity, and that this League is no respecter of persons.

In general, the League membership has not grown so rapidly in the past year as it did in 1900. Still we have made a goodly showing. At the time of my last annual report, we had a total membership of 5,463. Today we have 7,784, a gain of 42%. A few States have shown remarkable growths in their memberships. Among these are: Arkansas, 900%; Indiana, 486%; Minnesota, 202%; Idaho, 118%; Oklahoma Territory, 640%; Georgia, 333%; North Dakota, 139%.

At the time of our last annual meeting, we had 19 State divisions. Today we have 43 in working order, a gain of 126%. We now have 28 life members, and should have had 2,000 by this time if the wealthy sportsmen of the country had done their duty. We hope in time to get them to realize what the League has done; what it is doing; what it is to do; and that it has earned the substantial recognition and co-operation of all men and women who are interested in the preservation of the wild life of this country.

A year ago we had 10 local chapters. Today we have 40; a gain of 300%. The good done by these local organizations is simply beyond computation. I hear of it nearly every day, and in various ways. For instance: An officer of one of these local chapters wrote me a few weeks ago that for many years an annual side hunt had been held there, about Thanksgiving time, but that since the League had organized a local body there, had gone to work, had disseminated our literature and proclaimed our purposes, the men who had formerly conducted these side hunts had changed their minds, and that no such hunt was held last year.

A year ago we had 122 local wardens at work in various States. Today we have 156, a gain of 28%.

Your President has drafted and sent to Washington, for introduction in Congress, 3 important bills. One of these aims to provide better protection for the wild animals and birds of Alaska. It aims to prohibit the sale of game in that Territory at all times; and to prohibit the shipment of heads and skins therefrom, for sale. It makes an open season of only 2 months in the year for hunting; it provides for a non-resident license of $25 for each hunter, and limits the number of animals which any one man may kill in a season to one moose, one bear, one caribou, 2 mountain sheep and 2 goats. It provides for 3 territorial game wardens each to have the privilege of appointing one deputy. The bill provides that each hunter may bring the heads and skins of this number of animals out of the Territory, under a permit to be issued by the territorial secretary. It provides heavy penalties for violations of this proposed law, either by hunters or by express companies, or steamship companies, or other common carriers.

Another of these bills provides for the conversion of all forest reserves in the Western States into game preserves, and that these tracts shall be governed and policed as the Yellowstone National Park is now.

The third measure provides for the extension of the Yellowstone Park South and East, to include the adjacent timber reserves and to provide adequate winter range for the elk and other big game.

Your President has also requested the

Hon. John F. Lacey to prepare and introduce a bill looking to the purchase of the Allard herd of buffalo and the care thereof, for all future time, by the general government.

Your President recently called on President Roosevelt, in Washington, and outlined to him the provisions of these several bills. Mr. Roosevelt expressed his hearty approval of all of them. We may, therefore, rest assured that if we can induce Congress to pass these measures, they will be promptly approved by the President.

One branch of our work grows larger as time progresses. That is as to the number of reports that come to the President of violations of game and fish laws in the various States. Every such case is taken up in detail and turned over to the chief warden of the League, if we have one in the State from which the report comes. If not, then it is reported to the State game warden, with the request that the offender be arrested and punished. Thousands of offenders have been convicted in this latter way, for which the League gets no credit and not even a record. In thousands of cases where it is found impossible to reach the offender by law, a personal letter is written him, informing him that we have evidence of his unlawful acts, cautioning him against a repetition of them, and asking for a pledge that he will obey the law in the future. Many of these men reply that they will quit their unlawful work. In most of these cases, we hear afterward, from the person who made the original complaint, that since receiving our warning the offender has led a different life, and that there is no further cause for complaint against him.

My greatest regret is that we find it so difficult to arouse the Southern people to the necessity for the enactment and enforcement of rigid laws for the protection of bird life during the winter. These people are slow to act in this work of reform. We have not yet been able to secure enough members to enable us to organize divisions in North or South Carolina, Alabama, Mississippi or Louisiana. These States afford winter homes to thousands of migratory song and insectivorous birds, as well as wild fowl, and thoughtless people there kill them all winter long without regard to law or decency. The laws of most of these States permit the killing of quails up to March, and a few of them afford any protection, at any time of the year, for doves or robins. We are doing a vast amount of work in an effort to stir up these good Southern people; to get them into the League; to induce them to enforce such laws as they have and to secure the enactment of needed amendments thereto; but it is an uphill job, and we need all the co-operation we can possibly get from the faithful few. Nearly all Northern sportsmen have friends and acquaintances in the South. Thousands of Northern men go South in the fall and winter, to shoot; and all such should make use of every opportunity to talk with our Southern brethren to urge on them the necessity of joining this League, and working with it. We should have 1,000 members in each of the Southern States. Our work is needed there even more than in the North, because of the great number of migratory birds that center in small districts in the South, and thus become an easy prey for the man with a gun.

No Northern man thinks of shooting a robin at any time. Yet in the South, white man and negro alike slaughter these innocent and beautiful birds at every opportunity, and without regard to any law that may exist. Let us do everything possible to convince these Southern people that the robin and the dove are not game birds and should not be killed at any time.

I frequently get a letter from some League member complaining that he is not kept informed as to what the League is doing. This is because we have not money enough to issue monthly or even bi-monthly reports to members, and to send them out by mail as we should like to do. I dislike to talk shop, but I trust I may be pardoned for saying that the official organ gives a great deal of information every month as to the work of the League. It takes 20 to 25 tons of paper to print each issue of this magazine and it is impossible for anyone outside of my office to realize the amount of good it is doing in the cause of game protection. It is read by at least 325,000 people each month, only a small fraction of whom are League members. and thus it has its effect on all these people. This is one of the reasons why the League is doing so much more good than its members realize. And it is one of the reasons why more special bulletins are not sent out.

ANOTHER MENACE TO GAME PROTECTION.

A bill has been introduced in the State Senate which aims to legalize the possession of game in cold storage all through the year. Every worker in the cause of game protection knows what this means. You know that if game dealers and cold storage men are allowed to possess game in close season they will sell it clandestinely, and no power on earth can prevent them.

The bill is numbered 367 and is entitled, "An Act to amend the Forest, Fish, and Game Law by adding a section to be known as Section 141."

This is one of the most infamous and iniquitous measures introduced in Albany since this League was organized. It is inspired and backed by the Game Dealers' Association, and by the cold storage houses in this city.

We must kill it. To do this, we must act promptly, vigorously and in unison. We must show the lawmaking power at Albany that we are greater than the combined interests of this city, who are working to exterminate the game of the whole country.

Let every League member, every sportsman, every nature lover in the State write his Assemblyman and Senator at once, stating in emphatic terms the injustice of this measure and demanding its defeat. Let there be no uncertain sound in your words. Give your lawmakers to understand that the friends of game protection will hold them responsible for their action on this bill, and that all decent sportsmen of the State require and expect the members of the Legislature, who are not controlled by the game dealers and the cold storage men of New York City, to kill this bill.

I trust there may be such a showing of righteous indignation against this measure as has not been experienced by the members of the New York Legislature in 10 years past.

LEAGUE NOTES.

I have read with the deepest regret the announcement of the death of Mr. Pond. He impressed me, when I met him at the last annual meeting of the League, as a man of exceptional character; evidently possessed of a cheerful optimism, backed up with resources of indomitable will and ability to overcome obstacles. I feel certain you have lost a most valuable ally and that game protection and the L. A. S. in New York will miss his services in many ways. It will be most difficult to find a worthy successor to so marvelous a man, but the example of his devotion will be a stimulus to all connected with the work and a monument of no mean magnitude long after his most untimely end. I doubt if any one man's work, other than your own, has contributed so largely to give the League of American Sportsmen a well merited prestige all over the country.

Ernest Russell, Worcester, Mass.

At the annual meeting of the League the sportsmen of Indianapolis gave the visiting members a banquet at the Hotel English, on the evening of Feb. 12th. The tables were surrounded by a jolly crowd of men, and the visitors were given a cordial welcome. After dinner some interesting speeches were made and good stories told, both by resident members and visitors. This gathering adjourned at a late hour, and the members went home with renewed energy and enthusiasm, bent on doing everything in their power to promote the interests of the League and to protect the game.

The Hon. G. M. Bowers, U. S. Fish Commissioner at Washington, has joined the League. In so doing he has shown his great interest in the cause for which this League is working, and has set a good example for other State and United States officers who are appointed to their respective positions for the purpose of doing everything possible to protect game and fish.

Recreation comes among sportsmen not only as a medium of news, but as an educator as well. I recognize the fact that as the country becomes more thickly settled, we must take active measures to prevent the slaughter of game which a few years ago seemed so plentiful; and no one who is fully alive to the situation will feel like ignoring the advice given in that up-to-date magazine, Recreation. A number of sportsmen in almost any community can easily club together and put out a few dozen quails along small streams, where farmers will co-operate with them in trying to preserve the birds from severe storms and the merciless pot hunters. I should be glad to see every farmer in the country a subscriber to Recreation, as I know it would serve to remove some of their prejudices against those who are earnestly trying to make sport better in every way; not only by protecting game during the close season from shooters, but from their natural enemies, such as weasels, coyotes, magpies, etc.

A. L. Aikins, North Yakima, Wash.

Manager—Yes, there are a few vacancies in my company. Have you been on the stage long?

Lady—About 10 years.

"Ah! then you have had a good deal of experience?"

"N-no, I can't say I have."

"But you acted?"

"No, there was never anything for me to do."

"Ah, I see. You have been in the company of a great actress who wrote the plays herself."—New York Weekly.

She: So your brother is to be married? I suppose he is full of joyful anticipations?

He: Oh, not at all—he has been married before, you know.—Puck.

I am sorry to say I was a game hog before I began to read Recreation. Since then I have changed, thanks to your magazine. S. Ball, El Paso, Tex.

FORESTRY.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

FORESTRY IN NEW YORK.

The attack which wealthy camp owners in the Adirondacks are making on the College of Forestry, dictated entirely by selfish interests, has at least an educational advantage in that it brings out the true nature of Forestry, as an art and a business, making it better known and appreciated, by the necessity of explaining the procedures in the College Forest Management. Since such clear understanding of the nature of forestry is desirable elsewhere, I reprint one of the campaign documents, issued by the Director, in full. He has put the essential points into the form of 12 Theses, as follows :

Forestry is the art of utilizing the forest and at the same time perpetuating it. It is wholly utilitarian; it has nothing, except incidentally, to do with the esthetic aspects of forest growth, which concern the landscape gardener. A wood crop is its object, just as a food crop is the object of agriculture. The only obligation which forestry imposes in the use or harvest of a forest growth is to systematically replace the harvested crop. In this obligation mainly, if not alone, does forestry differ from lumbering.

A limitation of the size of trees to be cut or to be left uncut has not necessarily any bearing on the replacement of the crop. Such a restriction to cut or leave certain sizes is either indicated by financial considerations, or else it is a device to prevent over cutting, wherever no systematic attention to the replacment of the crop can be or will be given. It does not pay to cut below a certain diameter.

In the College forests no hard wood trees below 14 inches or soft woods below 12 inches are cut, unless they are defective and not fit to grow into the new crop, or likely to damage the young crop by shade or by being thrown by winds.

The many methods of reproducing a new crop which are practiced, vary mainly in the rapidity with which the old crop is removed, namely,

From immediate absolute clearing, when the new crop must be either artificially planted or is secured by seeds from a neighboring old stand;

Through various degrees of gradual removal; when the old crop is entirely removed in 2 to 20 years, the crop being secured from trees on the area by seeds, and rapidity of removal of the old crop being gauged by the need for light of the young crop;

To the so-called "selection forest," in which only single trees, here and there, are removed from time to time and nature alone is left to reproduce the crop as best it may in the small openings made.

No method of reproducing is the only proper one, and in an experimental or demonstration forest which is to teach methods and demonstrate their results, all or a number of these methods should be exhibited.

The choice of method depends on the species present or to be reproduced, on climate and soil, on the objects to be attained by the management and on financial considerations.

In a mixed forest of nature the species composing the forest are not all equally useful; in the foresters' forest the most useful ones must be made to preponderate or occupy the ground, and the "weed" trees must be subdued.

There are 3 objects to be attained by forest growth, namely, to furnish wood supplies, to furnish protection of soil and water flow, to furnish pleasure and sport. We may accordingly recognize supply forests, protection forests and luxury forests.

The first object is, to the people at large, the most important; the second is of importance only in certain limited locations; the third concerns only or mainly certain classes; but the third, as well as the second—pleasure and protection—can be attained without losing sight of the first—wood supplies. All 3 objects are simultaneously attained in the managed forests of Europe.

Where the second and third objects, protection and pleasure, are paramount, the methods of harvesting and reproducing the crop are circumscribed by the necessity of keeping a constant cover; hence, gradual removal methods are advisable, although by no means always necessary. In a supply forest the choice of method is limited only by financial consideration including the assurance of silvicultural success that is of a satisfactory new crop.

The gradual removal methods entail large initial investments for means of transportation over large territory, in order to harvest enough material annually or periodically, and their silvicultural success, that is the character of the new crop, is uncertain especially in the mixed forest. The immediate removal, followed by artificial replacement, entails money outlay for the latter from year to year, but saves expense in the harvest and reduces the investment for roads. Its silvicultural success can be forced; it is merely a question of pocket.

The selection forest system is the poorest, both financially and silviculturally, and to be applied only where absolute necessity for keeping a continuous cover exists or where better methods can not be practiced on account of market conditions.

Over 80% of the forests of Germany are managed under a clearing system (denudation) or rapid removal system; less than 20% are managed under slow removal systems or coppice, and mostly only on small limited areas. In Prussian state forests, nearly 7,000,000 acres, only 5%, 35,000 acres, are managed as selection forest; over 65% is managed in clearing and artificial replanting, less than 3% in coppice, the balance, 32%, in rapid removal system. On the cleared areas, 2,000 to 4,000 seedlings per acre more or less, are planted which, in 25 to 35 years, reduced to about 1,800 trees growing up like a wheat field, furnish in 60 years on soils not better than the Adirondacks 30 to 40,000 feet B. M.

A combination of natural regeneration with artificial assistance is the only rational method where, as in our culled forests, the most desirable species have been removed and the less desirable and the decrepit have been left on the ground. In such cases provision must be made to re-establish the desirable kinds by planting, after removal or reduction of the less desirable.

The College forest, according to the reading of the law, was primarily to be managed as a supply forest, for it is to "harvest and reproduce woodcrops and earn a revenue therefrom. Only secondarily or by implication is it to be managed as a protection forest, wherever this consideration is essential on steep slopes or hilltops. It is a mixed forest from which the desirable softwoods (pine and spruce) have been culled, and the less desirable hardwoods, decrepit and damaged runts, are left. The management has not been furnished with capital to make gradual removal methods practicable in most places, hence concentrated harvest, with artificial replacement of softwoods, assisted as far as possible by natural reproduction of both softwoods and hardwoods, leaving hilltops and steep slopes untouched to furnish soil protection and additional seeding, is in most places the only desirable method.

The choice of method was therefore partly forced by financial considerations, partly a result of deliberation on the best silvicultural result.

LUMBERING AND FISHERIES.

A visit to the lumber regions of the North at the present time can not fail to impress one with the evils of river driving. To stand on the bank and watch the logs glide easily by seems at first thought to be a cheap, easy and ideal method of transportation. Cheapness, however, is its only advantage Only those trees can be cut which will float. In this way the forest is robbed of its white pine, spruce and even cedar and balsam. After these have been exhausted it is finally necessary to build a railroad in order to transport the hardwoods which are left. If a railroad is built in the beginning both the hardwoods and the softwoods can be utilized together so that the cost of exploitation is per acre less than were the softwoods first cut and driven in the river and then, later, a railroad constructed for the transportation of the hardwoods.

River driving in the end, therefore, has probably no financial advantage in mixed forests. It is, the cheapest way of transporting softwoods; yet a large number of logs sink and are lost; others float beyond recovery into the brush and are overlooked; while others are splintered into bits by blasting in the process of jam breaking. River driving is fitful and uncertain. It is dependent on the quantity of water which nature supplies. It must be done in a hurry at one season of the year. If anything goes wrong and the drive gets tied up, the mill is deprived of its logs, contracts can not be filled and the whole business is more or less crippled in consequence.

In the case of railroad transportation the utilization is more nearly complete and work goes on throughout the whole year if need be. Men are evenly and permanently employed and the industry, while wood lasts at least, is more regular and certain. Some might argue that it is fortunate for the woods that river driving is still practiced. With river driving only the softwoods are used and the hardwoods are left to beautify the hills. In the case of railroad transportation everything would be cut clean and the mountain sides would be bared to the destructive action of fire, sun, wind and flood.

In regions in which forests are really needed for protective purposes little cutting should be permitted anyway. These areas should be under State control and should be exploited so they will perform the function for which they are most fit, namely protection against the destructive forces of nature. In such regions no lumberman should be allowed to operate at all and all work should be directed by trained foresters.

In the case of land where forestry is or should be practiced as a business it is best in the majority of cases where the woods are mixed, to cut clean, pile and burn the slash, and then plant afresh. Regeneration may be effected by leaving seed trees or belts of seed trees so that the ground will be naturally seeded. This method is slow and cheap. When land is cut clean in the North a growth of poplar and birch soon follows. This is an advantage rather than a disadvantage, because the poplars and birches serve as nurse trees to the pines and spruces which gradually make their appearance among the poplars and birches. This process may be hastened by cutting strips and planting. This strip cutting and planting may be done for $5 an acre.

There is, in fact, no advantage in the end in merely cutting out the softwoods, as happens in all regions where river driving is practiced.

The main objection to river driving, however, is that it pollutes streams to such extent that all the good species of game fishes, especially trout, are killed. The grayling was practically exterminated in Michigan by lumbering operations. The logs ruin the spawning beds, the river is filled with bark and dead-head logs, the water is rendered unfit to drink and the river is monopolized for a long period of time by a few lumbermen. Guides and tourists and even the natives are deprived of the use of it for some time during the very part of the year when boating is pleasantest; that is, in the Spring before the mosquitoes and flies come.

There is no doubt that the scarcity of trout in the Racquette river is due to river driving. The pickerel is blamed, but the trout and pickerel lived together in the streams long before river driving began. Even the pickerel will lose their hold in case river driving continues. They have simply held their own because they could endure more adversity than the trout.

FOREST FIRES.

You have, no doubt, seen the annual message of President Roosevelt, and in it are some suggestions about forestry that I hope will become laws. One important fact seems to have escaped notice, namely, the origin of forest fires, which have been destroying the forests to such an extent that if they are not prevented at once we shall live in a desert within the next 100 years. Of course we shall not be here, but we ought not to be selfish. We should provide for the pleasure and needs of others that may come after. The cause of forest destruction to which I refer, is the railroads that run through virgin forests. I should like to learn of one place where the engines of the railroads have not been at fault. In my travels to the extreme West, Whatcom, Washington, I have seen the work of fire all along the line of the railroads, and no one can convince me that the hunters are responsible. When wood burning engines were in use, the smoke stack was made so that cinders could not be thrown out; but now the engines have no such appliances and I see no reason why they should not be made to use them. Many people saw the prairie at Huffman's Station, 7 miles East of Dayton, Ohio, on lands owned by H. Cooke, fired by the railroad at least 5 times during one day when we camped there last summer. We were told by the tenants that from the 1st week in July they had to watch continually to prevent being burned out. I hope you will take up this matter. There is no doubt of the result if you will. The results of your fearlessness in advocating the protection of game are wonderful.

G. C. Edgeter, Dayton, Ohio.

FOREST RESERVATIONS.

With President Roosevelt's recognition of the fact that "the forest and water problems are perhaps the most vital internal questions of the United States," there is hope that the federal forest reservations will soon be more than merely timberlands withdrawn from entry, occupation and use, but well administered, most useful properties.

Additional hope comes from the appointment of Prof. F. Roth, late of Cornell College of Forestry, to the position of Chief of the Forestry Division in the General Land Office, in charge of the management of the forest reservations. The consolidation of the nation's forestry interests in one bureau, which the President in his message strongly advocates, is, of course, bound to follow.

The bill introduced in Congress by Mr. Brownlow, providing for the purchase of a national forest reserve in the Southern Appalachian mountains, not to exceed 4,000,000 acres, is another move in the right direction, recognizing the national obligation of assuring desirable conditions in all parts of the Union.

The proposition to name this reservation the "McKinley National Park and Forest Reserve," in recognition of our lamented President's active interest in this proposition, can only accentuate the patriotic duty involved in it.

PURE AND IMPURE FOOD.

"What a Man Eats He Is."

Edited by C. F. Langworthy, Ph. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

TRANSPORTING FRESH FRUITS.

"It is important to note," says H. E. Williams, of the United States Weather Bureau, in a discussion of cold storage in relation to food products, "that in shipping fruits, etc., many of the precautions taken in packing to keep out the cold will also keep in the heat, and there is really more danger in some instances from heating by process of decomposition than from cold. All fresh fruit tends to generate heat by this process. A carload of fresh fruit approaching ripeness, closed up tight in an uniced refrigerator car, with a temperature above 50 degrees, will in 24 hours generate heat enough to injure it, and in 2 or 3 days to as thoroughly cook it as if it had been subjected to steam heat. Suitable refrigerator transportation must, therefore, provide for the heat generated within as well as the outside cold. The perfection of refrigeration for fruit is not necessarily a low, but a uniform, temperature. A temperature of 40 degrees to 50 degrees will keep fruit 20 or 30 days, if carefully handled. Strawberries have been transported from Florida to Chicago, transferred to cold storage rooms, and remained in perfect condition for 4 weeks after being picked.

"Fruit intended for immediate loading in cars should be gathered in the coolest hours of the day, and that which has been subjected to a high temperature before being shipped should be cooled immediately after being loaded. Ordinary refrigeration will not cool a load of hot fruit within 24 hours, and during that time it will deteriorate much in quality. It should be cooled in 4 or 5 hours in order to prevent fermentation. It is stated that the more intelligent of the large shippers of fruit in the South have about concluded that it is impracticable with any car now in use to load fruit, especially peaches and cantaloupes, direct from the orchard into the car with assurance of safety. In deference to this opinion one Southern railroad has announced its intention of establishing, at the largest shipping points along its lines, cooling rooms for the purpose of putting the fruit in satisfactory condition for transportation before being loaded.

"Shipments of tropical fruits in ordinary freight cars can not be made safely when the temperature is below 30 degrees, except in cases where the distance is so short as not to expose them for a longer period than 12 hours, and even then they must be carefully packed in straw or hay. The hardier Northern fruits and vegetables can be safely shipped in a temperature of about 25 degrees, but the same protective measures must be employed as in the case of tropical fruits when lower temperatures prevail. Long exposure to temperature of 20 degrees is considered dangerous to their safety. Foods preserved in cans or glass should not be shipped any distance when the temperature is below the freezing point.

"Oranges shipped from Florida to points as far North as Minnesota are started in ventilator cars, which are changed at Nashville to air-tight refrigerator cars, the ventilators of which are kept open, provided the temperature remains above 32 degrees, until arrival at St. Louis, from which point the ventilators are closed and the cars made air-tight. Lemons and oranges are packed in crates. Each layer of crates in the car is covered by and rests on straw, usually bulkheaded back from the door and car full. Oranges loaded in ventilated or common cars should be transferred to refrigerator cars when the temperature reaches 10 degrees above zero; in transit, with a falling temperature the ventilators should be closed when the thermometer reaches 20 degrees, and with a rising temperature the ventilators should be opened when it reaches 28 degrees. For lemons the minimum is 35 degrees for opening and closing the ventilators and for bananas 45 degrees for opening or closing. Some shippers say that ventilators on cars containing bananas, lemons, and other delicate fruits should be closed at a temperature of 40 degrees.

"In shipping carloads of bananas a man is usually sent in charge to open and close the ventilators. Bananas should be put in a paper bag and a heavy canvas bag, and then covered with salt hay, unless put in automatic heaters, when the fruit is packed only in salt hay. Bananas are particularly susceptible to injury by cold, and require great care. If exposed to temperatures as low as 45 they almost invariably chill, turn black, and fail to ripen. Cars containing them are sometimes, in extreme cold weather, protected by throwing a stream of water on them, which, freezing, forms a complete coating of ice. The method adopted by some firms of shipping this fruit in winter is to heat refrigerator cars to about 90 degrees by oil stoves, remove the stoves and load the fruit quickly, put the stoves back and heat up to 85 degrees or 90 degrees, then remove the stove again, close the car tight, and start it on its way. Bananas shipped in this manner are held to be safe for 48 to 60 hours, even though the temperature goes to zero.

"Quinces, apples, and pears are packed in barrels, each layer of barrels covered with and resting on straw."

LOSSES IN COOKING MEAT.

In connection with the nutrition investigations conducted by the Office of Experiment Stations of the Department of Agriculture, studies have been made by Prof. H. S. Grindley on the losses which are sustained when meat is cooked.

Experiments have shown that a piece of meat weighs less when fried or boiled than when raw. One object of the investigations referred to was to determine the character of this loss; whether the material consisted chiefly of juice in the meat, evaporated by the heat of cooking, or whether it consisted of actual nutritive materials. Should the latter supposition prove true, wholly or in part, it seems desirable to know whether it is possible or desirable to avoid such losses. Professor Grindley cooked samples of beef and mutton in several ways. In some cases the meat was pan-broiled, that is, quickly fried in a hot frying pan in which no fat was added. In other tests, the meat was cooked in hot water. Sometimes the water was cold at the start, rapidly raised to the boiling point, and the boiling continued. In other experiments the degree of heat used was varied in different ways. While the investigations on the losses in cooking meat are still inadequate, the conclusions given below seem warranted from the results of the experiments. Though the majority of the tests were made with lean beef, it is probable the results apply to other meats also.

The chief loss in weight during the cooking of beef is due to the driving off of water. When beef is "pan broiled" there appears to be no great loss of nutritive material. When beef is cooked in water, 3 to 20 per cent of the total solids are found in the broth. The material thus removed from the meat has been designated as a loss, but is not an actual loss if the broth is utilized for soup or in other ways. Beef which has been used for the preparation of beef tea or broth has lost comparatively little nutritive value, though much of the flavoring material has been removed. The quantity of fat found in the broth varies directly with the quantity present in the meat; that is, the fatter the meat, the larger the quantity in the broth. The quantity of water lost during cooking varies inversely as the fatness of the meat; that is, the fatter the meat, the less the shrinkage in cooking. In cooking in water the loss of constituents is inversely proportional to the size of the piece of meat. In other words, the smaller the piece, the greater the percentage of loss. The loss appears to depend on the length of time of cooking. When meat is in pieces weighing 1½ to 5 pounds, and is cooked in water at 80 to 85 deg. C. (175 to 185 deg. F.), there appears to be little difference in the quantity of material found in the broth, whether the meat is placed in cold water or hot water at the start.

The nature of the nitrogenous ingredients of the broth is not yet fully understood. This subject is now being studied in connection with further inquiries regarding the changes in meat in cooking.

THE COOKING OF VEGETABLES.

The following suggestions were recently compiled for cooking vegetables:

The coarser vegetables should be put into salted, fast boiling water, allowing one tablespoonful of salt to 2 quarts of water for everything but spinach. The cooking should be steady and the vegetables should be taken up the moment they are done, as leaving them in the water detracts from their flavor. When the water is hard, a little baking soda may be added to soften it; but not more than one-quarter teaspoonful to one gallon of water.

A few of the more delicate vegetables are exceptions to this rule. While steady cooking is necessary, it should not be fast enough to break them. Green peas, asparagus and cauliflower belong to this class. The length of time required for cooking vegetables follows: Potatoes, squash, spinach and parsnips, 30 minutes; new beets, carrots and onions, 30 to 45 minutes; new cabbage, string beans and salsify, 45 to 60 minutes; winter vegetables, as beets, carrots, turnips and onions, one to 2 hours; winter cabbage, one hour. Spinach should be cooked in as little water as possible and less salt than used with the other vegetables, say ½ as much to the given amount of water. Not more than one pint of water to a peck of spinach should be used.

Are you saving your photo prints? If not, begin at once. Send me 2 yearly subscriptions to Recreation, at $1 each, and I will send you a Buechner album that will hold 100 4 x 5 prints. It will be of great value to you in showing the progress you make in your photography, from the first page to the last, and your prints will always recall interesting memories.

BOOK NOTICES.

NATURE STUDY AND NATURE STUDY BOOKS.

During the last few years a great many "nature books" have come from the American press. A few of these have had somewhat to do in creating the widespread interest in nature study, which is such a marked feature in the educational and popular tendencies of the present time. But most of these books are, rather, a result of this tendency, and in nowise contribute further inspiration themselves, because they have been written by people who do not know nature when they meet her out of doors. In too many cases the authors of nature study books are students of nature only as *dilettanti,* who have had no training in the exact methods of science. They know neither the method nor the meaning of nature, and have curious conceptions of what naturalists mean by "species," "environment," "adaptation," "survival of the fittest," "protective mimicry," or any of the ndamental facts and principles of evolun. Nature study, with many of these ers, is imagination, emotion, and poetry. s of the "Oh, how charming!" sort, h applies human attributes and human enclature to all sorts of animals, and nts, too, for that matter, in a most reckss and extravagant manner. The style is at of the kindergarten, wherein entertainnent is the end sought.

But not all the recent nature books are of this kind. Some of them have been written by men, and some by women, too, who have had careful scientific training, who are field naturalists of wide experience, and who have a direct and intimate acquaintance with the animals or plants about which they write. Such a book is Dugmore's "Bird Homes," and another such book is Howard's "Insect Book," recently published by Doubleday, Page & Co., New York. Dr. Howard, United States Entomologist, is a wideawake, thoroughgoing student of nature at first hand. He is a college man who got his early training in the method of science under Professor Comstock at Cornell. He tries to see things as they really are, and insists that you do the same when using his "Insect Book." The mental attitude is important in the study of any subject, and in nature study there is but one that is at all worth while. That is a determination to see things as they really are.

Imagination is not much needed in the study of nature. Casting away the imagination does not leave the study of nature or anything else cold and uninteresting. To see a fact as it really is is quite as fascinating and satisfactory as to imagine 40 things that are not so. Besides, it is worth a great deal more in character building and every other way. Dr. Howard's book is written on this principle. While entirely scientific it is no less entertaining. For that matter the best and most entertaining nature books are those which have been written by people who have had scientific training. The nature books not so written belong in the same category with newspaper science.

The "Insect Book" is a popular account of the bees, wasps, ants, grasshoppers, flies and other North American insects, exclusive of the butterflies, moths and beetles, with full life histories, tables and bibliographies. There is to-day almost nothing that covers authoritatively, yet popularly, this vast field, so that the present volume has special importance. With 300 text-cuts, 16 colored and 32 black and white pages made direct from the insects themselves, the subject is abundantly as well as beautifully illustrated.

The language is simple and easily understood by anyone who really cares to take the trouble to do a little thinking as he reads and a little looking whenever he has the opportunity. Full biographies of many insects are given to show how exceedingly interesting the life histories of our common insects are. A constant aim of the author is to get the student to realize that the life histories of the vast majority of insects have never been fully worked out, and that therein lies a rich field for anyone who wants to contribute to the sum total of human knowledge. Select almost any insect you please, watch it carefully for a season and you are sure to make new and important discoveries.

Another useful book is Arnold's "Sea-Beach at Ebb-Tide," published by The Century Co. It is a well made book of 490 pages, with many text figures and photographic illustrations of the multitude of animal and plant forms one may find on the beach at low tide. The book treats of the marine algæ, including the blue green, grass green, olive green, brown, and red seaweeds, and, among marine invertebrates, the sponges, polyps, worms, molluscoids, echinoderms, arthropods, mollusks, and chordates. The treatment is necessarily brief, so large is the field covered, and there is not enough natural history in the book. Nevertheless, it is a book which will prove useful in the study of the myriads of animal and plant forms of the sea beach.

EDITOR'S CORNER.

CONSULT THE RECORDS.

I have before me a letter written by the Marlin Arms Co., January 21, 1902, to L. O. Ashbury, Auburn, N. Y., in which they say, "You never find an article which is not advertised in Recreation recommended in its reading columns."

To show the glaring falsehood of this statement it is only necessary to look on pages 50 and 51 of January Recreation, where you will find an article of more than a page, recommending the Peters' cartridges in strong terms. These goods are not advertised in Recreation, and probably never will be. The reader can also prove Marlin a liar by reading the second article on page 51, of January Recreation, in which the Mauser rifle is strongly recommended, and this weapon is not advertised in Recreation.

The reader can pass on over to page 53, and find an article endorsing the Greener gun, which is not advertised in Recreation.

Then if he will take up a copy of February Recreation and turn to page 129 he will find the Stevens' goods strongly commended. They are not advertised in Recreation, and it is not likely they will ever be.

The reader can easily involve Paddy Marlin in another falsehood by turning to page 130 of February Recreation, and reading there a strong endorsement of King's semi-smokeless powder, which is not advertised in Recreation.

Then on page 133 is another recommendation of Peters' goods, and this puts another brand on Paddy Marlin. He knew he was lying when he wrote this letter to Mr. Ashbury, but he did not know that Mr. Ashbury would send the letter to me.

Every honest reader of Recreation knows I never deny anyone the privilege of commending in my reading columns any article he is using, unless it happens that the maker thereof is fighting Recreation and trying to destroy it, as Paddy Marlin is. It makes no difference to me whether a manufacturer of sportsmen's goods advertises in Recreation or not. He has a perfect right to stay out if he chooses to do so, and I never criticise him for it; but when a man undertakes the dirty, disreputable methods of attacking me that Marlin has adopted, he will find he has plenty of trouble on his hands.

ANOTHER OLD GUN MAKER GONE.

Charles Parker, founder and president of the Parker Brothers Gun Company, Meriden, Conn., died Jan. 31st, at the age of 93. He was a poor boy, and worked on a farm from the time he was 12 years old until he was 18, at wages varying from $5 to $12 a month. Then he served an apprenticeship in a button factory. He then engaged in mercantile pursuits for several years, and finally established the gun factory which has made his name known all over the civilized world.

Mr Parker retired from active business years ago, but his energy and his ability as a financier were felt in various enterprises in which he was interested until the day of his death. Besides the gun business, Mr. Parker was president of the Charles Parker Company and the Meriden Curtain Fixture Company. While Mr. Parker's loss will be keenly felt by thousands of friends and acquaintanecs, his heirs and associates will conduct the various lines of business as heretofore.

A Pasadena correspondent who signs his communication "The Meddler" is hereby informed that his letter went promptly into the waste basket, as do hundreds of other anonymous letters that come to this office. A man who has not enough courage to sign his name to a personal letter, written to an editor or to any other man, should not waste his time and postage in writing. It is a rule in all editorial offices that letters which do not bear the real name and address of the writer, go into the waste basket. Signatures are always withheld from publication if desired.

R. H. Travis, of Montague township, Sussex County, N.J., shot a quail, February 9th, in violation of law. He was arrested by Game Warden Hendershot, taken before Justice Fuller, of Sandyston, and sentenced to pay a fine of $20 or serve 90 days in jail. At last account Travis was trying to borrow the money, but there seemed little show of his being able to get it. I trust he may have failed and that the sheriff may have the pleasure of feeding him for 3 months.

Rev. Joshua Cooke, known and loved by all reading sportsmen as Boone, has written a delightful story of the battle of Queenston Heights, which was fought Oct. 12th, 1812, near Niagara Falls. Boone's father was in the battle and the son recounts the story as it was told to him in the days of his youth. The little book sells at 25 cents, and can be had by addressing the author at Lewiston, New York.

PUBLISHER'S NOTES.

THE MALCOLM TELESCOPE SIGHT.

The Malcolm Telescope Manufacturing Company, of Syracuse, N. Y., believes it has realized the expectations of the shooting world in perfecting telescopic sights that meet the demands for clear and extended vision and absolutely stable mountings, self adjustable to the gun and eye by the purchaser himself. The Company is now ready to manufacture in large quantities its perfected telescopic sights, with long or short tubes, and place them on the market as a commercial article, thereby giving purchasers the opportunity of examining a telescopic sight outfit before buying. To accomplish this change in business methods has necessitated radical and perfected changes in mountings. The Company intends to place its goods in the hands of the dealers in cities of the United States as fast as possible; but if anyone about to buy a telescopic sight outfit finds the local dealer does not handle the Malcolm goods, the telescope and mountings, separate or adjusted to any make of rifle or pistol, can be obtained by writing the Malcolm Telescope Manufacturing Company direct, at Syracuse, N. Y.

SETON PORTFOLIO.

Chas. Scribner's Sons, 153 Fifth Ave., this city, have published a portfolio of 12 of E. T. Seton's best known and most striking pictures of wild animals. The size of the pictures is 10 x 14 on cardboard mounts 14 x 21 inches, and the set sells for $6. The pictures were prepared for reproduction under Mr. Seton's personal supervision and are in 4 printings by a new and effective process which gives each plate the freshness and attractiveness of the original drawing. The subjects are:

Lobo—the Wolf; Johnny Bear; The Sandhill Stag; The Buffalo; Courtaut—the Wolf; Family Life—the Bears; Lito—the Coyote; Lito and Brood; The Grizzly Bear; The Fox; The Kangaroo Rat; The Coons; Krag—the Kootenay Ram.

Considering the fine quality and size of the pictures the price is exceedingly low. All these pictures are suitable for framing and no doubt every sportsman who buys a set will frame at least some of them. Write for a circular and say you saw them mentioned in RECREATION.

A RAILROAD FOR CAMPERS.

Dr. J. N. Hall, of Denver, Colo., author of the excellent article printed on pages 279, 280, 281 and 282 of this issue of RECREATION, is one of the best known physicians in the West. He has handled this subject in a masterly way, and every man and woman who is suffering from overwork or from too close confinement within doors, should read Dr. Hall's article. No one can fail to realize the benefit of mountain camp life after doing so, and the doctor's arguments should induce thousands of weary people to go to the mountains this summer.

The C. R. I. & P. Ry. Company is paying special attention to the wants of people who are seeking good camping places in Colorado, and everyone interested in this question should write John Sebastian, G. P. A., Chicago, for information.

CONCERNING PROCTORS.

Proctor's, Newark, opened to the public Jan. 6, and the attendance has been phenomenally big ever since.

In Montreal a permanent stock company has been established. The best comedies and dramas will be presented, with vaudeville between the acts.

Proctor's, Albany, will continue to present the best vaudeville the market affords. At Proctor's 23d Street, New York, continuous vaudeville rules. The 5th Avenue, 58th Street and the 125th Street will have dramatic presentations by the Proctor Stock Companies. Vaudeville of the best grade will be presented between the acts.

Sunday concerts rule at all Proctor's New York City Theatres. Refined vaudeville is presented continuously after 2 P. M.

Geo. F. Webber, Detroit, Mich., has issued an interesting catalogue of his knit jackets, sweaters, jerseys, golf coats and hunting shirts, copy of which every sportsman should have. There are few men or boys or women or girls who engage in any kind of outdoor sports who would not find something illustrated in this catalogue that they would want. Mr. Webber started about 5 years ago making shooting jackets only, and began advertising them in RECREATION. They have been represented there nearly every month from that day to this and as a consequence his business has grown until he now makes a large line of goods that are in constant demand by lovers of the outdoor world. Write him for a catalogue, and say you saw it mentioned in RECREATION.

The Great Western Gun Works, Pittsburg, Pa., have made and put on the market a palm rest for rifle shooters, which is destined to prove popular among target shooters. It is a novelty in that it may be instantly attached to or detached from any rifle on the market. It clamps on the trigger guard or finger lever, as the case may be, and is fastened by a thumb screw. Thus, if a shooter has several guns that he wishes to test or to use regularly from time to time, he can use the same palm rest on all of them, without any difficulty or loss of time.

If you have any use for an implement of this kind, write the Great Western Gun Works for an illustrated circular, and say you saw it mentioned in RECREATION.

THE SAVAGE ARMS CO., UTICA, N. Y., HAS ISSUED A CALENDAR FOR 1902. THE PICTURE DESIGN IS BY DAN SMITH A WELL-KNOWN ILLUSTRATOR, AND REPRESENTS A MOUNTAIN TRAGEDY. THE PICTURE HAS ALL THE DASH AND SPIRIT FOR WHICH MR. SMITH'S WORK IS FAMOUS, AND WOULD MAKE A WELCOME ADDITION TO THE COLLECTION OF EVERY BIG GAME HUNTER IN THE COUNTRY. SEND 6 CENTS FOR A COPY OF THE CALENDAR AND SAY YOU SAW IT MENTIONED IN RECREATION

The above was printed in March RECREATION with the word catalogue substituted for calendar. The Savage people make no charge for their catalogue of guns and now offer to send their 1902 calendar to RECREATION readers for 4 cents in stamps.

Savage Arms Co., Utica, N. Y.

DEAR SIRS: I should like your 1902 catalogue. I have been shooting a Savage the past 4 years. Have proven conclusively to several prospectors that it is the best on earth. Two years ago Sandy Jack was looking her over, I explaining her points. When we got through Sandy said, "Mac, I can take an armful of rocks and beat that shooting iron;" but I saw Jack about 2 weeks ago. He said, "Well, Mac, I got enough money together at last to get a Savage, and I'm ready to take an even break with anything that wears hair, hide or smells like meat."

R. McGregor, Hump, Idaho.

Chas. A. Hayden, Oxford, Ohio, has invented and put on the market a handy pocket water filter that is sure to become popular among sportsmen. Every man who has ever had to drink muddy or filthy water, or who has had to stand on his head in a spring or a deep brook in order to get a drink of good water will appreciate the filter with a long hose that will allow him to press the button and get a drink of good pure water even from a mud hole, and in a comfortable position.

Write Mr. Hayden for a circular of the filter, and say you saw it mentioned in RECREATION.

The Western Gas Engine Company, Mishawaka, Ind., builders of RECREATION launches and gasoline engines, has issued a beautiful catalogue. It shows a lot of RECREATION launches in actual use. They are enough to make any man's mouth water for a chance to get afloat in one of these beautiful vessels. If you have any desire to travel in this delightful way, write these people for a copy of their catalogue, and say you saw it mentioned in RECREATION.

Walsrode frequently makes a record for itself when used by expert shooters. It recently won the Grand Prize at Monte Carlo, which is valued at $4,000. Walsrode also won the Third Prize in the same event, and Grand Prize in the tournament of 1897. No better powder for all round work is made in the world. Schoverling. Daly & Gales, 302 Broadway, New York, are the American agents for Walsrode and sportsmen's powders. You should communicate with them.

I get a great many inquiries from Eastern sportsmen for the name and address of some one dealing in taxidermists' supplies, and all such are referred to Mr. Fred. Kaempfer, 88 State, St., Chicago, Ill., If there is a man in New York or any other Eastern city who deals in this class of goods he should advertise in RECREATION, and thus get at least a portion of this trade.

One-thousand-mile books of the Plant System of Railways, good from Washington to Charleston, Savannah, Montgomery, Thomasville, Jacksonville, Tampa, Albany, Brunswick and all intermediate points, rate $25 each, are on sale at office of J. J. Farnsworth, Eastern Passenger Agent, No. 290 Broadway, N. Y.

The Polk Miller Drug Co., Richmond, Va., has issued a new edition of Mr. Miller's book, entitled "Dogs, Their Ailments, How to Treat Them." The text has been revised and some new matter added. Every dog lover should have a copy of this book. All it costs is a postage stamp.

Columbia Barracks, Cuba.

Mr. Henry L. Jespersen, New York.

Dear Sir: You have treated me so well in the past that I give you the preference in all my orders for sporting goods, if price is satisfactory; also, because you advertise in RECREATION. Yours truly,

C. O. Moseley.

I have received the Syracuse gun you so kindly sent me as a premium for the best sportsman's magazine in the world, RECREATION. The gun, the magazine and your good work on game protection are to me the best that are to be had. We have a number of game hogs around here and nothing would do me more good than to test my new Syracuse on some of the old razor-backs. I will do all in my power to build up RECREATION and the good cause of fish and game protection.

Albert Schweinfest, Hamilton, O.

BEFORE RECIEVING THIS PACKAGE SEE THAT SEALS ARE UNBROKEN
EXPRESS PREPAID GLASS
NAME John Williams
TOWN Troy N.Y.
20
HAYNER'S SEVEN YEAR OLD RYE
THE HAYNER DISTILLING CO DAYTON, OHIO, U.S.A.
CAUTION

FOUR FULL QUARTS FOR $3.20 EXPRESS PREPAID

QUALITY AND QUANTITY GUARANTEED

IF NOT SATISFIED YOUR MONEY REFUNDED

HAYNER'S

PURE WHISKEY.

Our distillery was established in 1866. We have enjoyed 34 years' continual growth until we now have one hundred and sixty-five thousand customers throughout the United States who are using Hayner's Whiskey—an evidence of true merit.

We give you absolutely pure whiskey at the lowest possible cost.

Our entire product is sold direct to consumers, thus avoiding middlemen's profits and adulteration. If you want pure whiskey our offer will interest you.

We will send four full quart bottles of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for $3.20, express prepaid. We ship in plain packages—no marks to indicate contents.

If after testing it is not found satisfactory return at our expense and we will return your $3.20.

Such whiskey as we offer for $3.20 cannot be purchased elsewhere for less than $5.00

REFERENCES: Third National Bank, Dayton; State National Bank, St. Louis, or any of the Express Companies.

THE HAYNER DISTILLING CO.,

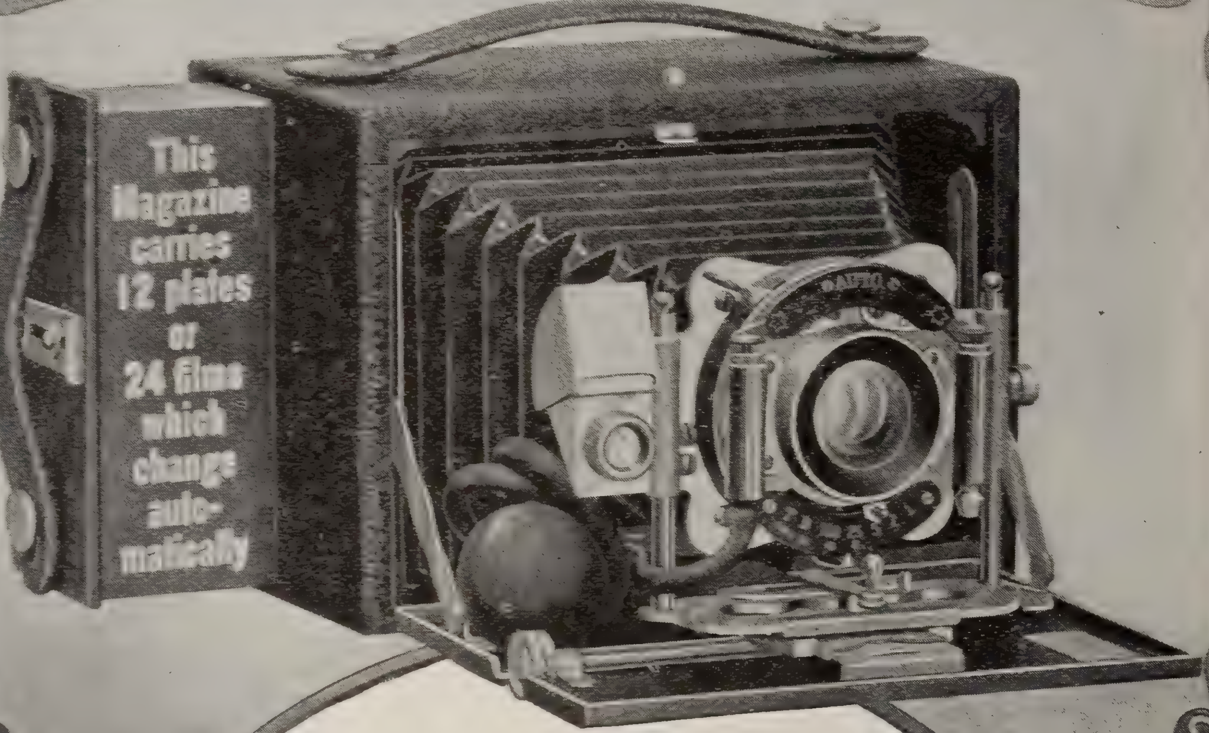
226-232 W. Fifth St.,
Dayton, O.

305-307 S. Seventh St.,
St. Louis, Mo.

WRITE TO NEAREST ADDRESS.

N. B.—Orders from Ariz., Colo., Cal., Idaho, Mont., Nev., N. Mex., Oreg., Utah, Wash., Wyo., must call for 20 QUARTS by freight, prepaid.

I guarantee the above firm will do as it agrees.—EDITOR.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AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

7th ANNUAL COMPETITION.

RECREATION has conducted 6 amateur photographic competitions, all of which have been eminently successful. The 7th will open April 1st, 1902, and close November 30th, 1902.

Following is a list of prizes to be awarded:

First prize: A Long Focus Korona Camera, 5 x 7, made by the Gundlach Optical Co., Rochester, N. Y., fitted with a Turner-Reich Anastigmat Lens, and listed at $85.

Second prize: A No. 3 Folding Pocket Kodak, made by the Eastman Kodak Co., Rochester, N. Y., fitted with a Bausch & Lomb Lens, Plastigmat Unicum Shutter, and listed at $61.50.

Third prize: An Al-Vista-Panoramic Camera, made by the Multiscope and Film Co., Burlington, Wis., and listed at $40.

Fourth prize: A Wizard C Camera, 4 x 5, made by the Manhattan Optical Co., Cresskill, N. J., with B. & L. Iris Diaphragm and Leather Carrying Case; listed at $33.

Fifth prize: A Waterproof Wall Tent, 12 x 16, made by D. T. Abercrombie & Co., New York, and listed at $32.

Sixth prize: A Gold Hunting Case Watch; listed at $50.

Seventh prize: A Tourist Hawkeye Camera, 4 x 5, and made by the Blair Camera Co., Rochester, N. Y., and listed at $15.

Eighth prize: A Bristol Steel Fishing Rod, made by the Horton Mfg. Co., Bristol, Conn., and listed at $6.

The 10 next best pictures will each be awarded on dozen 8 x 10 Carbutt Plates, made by the Carbutt Dry Plate Co., Wayne Junction, Philadelphia, Pa.

The 10 next best pictures will each be awarded one dozen 5 x 7 Carbutt Plates.

The 10 next best pictures will each be awarded one dozen 4 x 5 Carbutt Plates.

A special prize: A Goez Binocular Field Glass, listed at $74.25, will be given for the best picture of a live wild animal.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or other animals, representing in a truthful manner shooting, fishing, amateur photography, bicycling, sailing or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of RECREATION. Negatives not to be sent unless called for.

In submitting pictures, please write simply your full name and address on the back of each, and number such prints as you may send, 1, 2, 3, etc. Then in a letter addressed Photographic Editor, RECREATION, say, for instance:

No. 1 is entitled —— ——.
Made with a —— —— camera.
—— —— lens.
On a —— —— plate.
Printed on —— —— paper.
Length of exposure, —— ——.

Then add any further information you may deem of interest to the judges, or to other amateur photographers. Same as to Nos. 2, 3, etc.

This is necessary in order to save postage. In all cases where more than the name and address of the sender and serial number of picture are written on the back of prints I am required to pay letter postage here. I have paid as high as $2.50 on a single package of a dozen pictures, in addition to that prepaid by the sender, on account of too much writing on the prints.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

PLATES VS. FILMS.

In an endeavor to point out the advantages and disadvantages attending the use of plates and films their relative prices must be considered. These are, in New York City, as follows:

4x5 Plates	4x5 roll films	Carbutt's 4x5 cut films
52	90	70
39 (Lovell's Extra Fast)		70

So far as price is concerned, it is evident that, were it not for other considerations, films would never have had an existence. However, the disparity in bulk and weight between plates and films is marked:

Weight—4x5 plates, 1 pound 3 ounces; 4x5 roll film, 4 ounces; 4x5 cut films, 1⅞ ounces.

The peculiar advantage of the daylight loading feature of the roll film package rules cut film, which has no such advantage, out of consideration, and leaves us to decide if the lightness and convenience of the roll film are or are not worth the additional increase of 50 to over 100 per cent. in cost of roll film over plates.

I think the foregoing are all the advantages and disadvantages that present themselves to the novitiate in photography. Other considerations than cost, bulk, weight and convenience are brought to light by experience. Of these the first to claim attention is the comparative speed of plates and roll film.

Every well known extra rapid plate on the American market has an advantage over films in speed. The shutters of the various roll film cameras are so nicely adjusted to the speed of the films in use that the shortcoming of the film in regard to speed is not much in evidence, save when they are substituted for plates for high speed work in a camera designed to take both plates and films interchangeably. My own experience would not warrant the use of films in the stead of plates with a focal plane shutter working at its maximum rapidity, for under some circumstances even our fastest plates have demanded the use of the largest apertures of the Steinheil, Goerz, Zeiss convertible, and of the new Plastigmat lenses, and were then found wanting in speed sufficient to offset adverse conditions. But the matter of the comparative speed of plates and films is not of so much importance as their keeping qualities.

That plates are much superior to films in this respect is due to the support on which the emulsion is coated. In plates there is nothing extraneous to the emulsion itself, save natural causes, to set up deterioration. In the case of films the deterioration of the emulsion is directly traceable to the celluloid support, so that if the emulsion would keep well on a glass support, it may not do so when coated on celluloid.

Cloud effects are desirable, and halation is not; hence ordinary films give better renderings of clouds in ordinary landscape work and greater freedom from halation, than do ordinary plates. But roll films are all ordinary and one inquires in vain for roll films giving correct color values, and for roll films of various speeds for various kinds of work.

Here I am at a loss for a corresponding advantage in roll films to offset this great advantage attending the use of plates. The professional takes your portrait, employing fast plates. He copies your paintings, using color-sensitive plates, medium with a screen, slow without. He has a line drawing to copy and uses a contrast plate. He photographs the interior of your house; if many windows are to be included, he resorts to non-halation or backed plates, or uses ordinary plates to which he has applied a backing of his own. Nor does the professional landscape or seascape photographer use roll films, notwithstanding the amateur uses them outdoors, largely because of his objection to the weight of plates. Who has not admired Jackson's landscapes and Bolles' seascapes? No one asks: Do these men use plates or films? Nor do the foremost amateurs in any country use roll film cameras for any purpose other than the making of memoranda, that is, as a sort of pocket sketch book for the recording of bits here and there thought worthy of after, and more serious, consideration. I know of no instance in which highest awards have been made to pictures printed from film negatives in competitions open to the users of both plates and films.

I believe in the making of large negatives for direct printing rather than employing small plates or films and afterwards throwing up enlargements from small negatives. In this I agree with a vast majority of American workers, both amateur and professional, always excepting the button-presser.

There is little to be said in favor of films as against plates so far as development is concerned. Never having known anyone to prefer handling films, I will not argue the advantages of plates, but simply mention rigidity, tank development, fixing in alum-acid baths in grooved boxes, non-use of glycerine, and convenience in printing, as in favor of plates; development in rolls of small sizes, quick drying and printing from either side of film, as in favor of films.

Electric markings, incident and peculiar to roll films, never appear on developed plates. I have developed whole rolls of films and found the markings to run through the entire rolls.

Plates, being rigid, if in focus at all, are in the focal plane throughout their length. Under the same conditions, because of its curling propensity, a roll film might have its edges only in the focal plane, receding therefrom gradually toward its center, which might be decidedly out of focus in some instances.

I should mention the breakage of glass negatives and the room required to store glass negatives as against glass and in favor of films. Breakage is a small item, however; not more than one negative a year in my own experience.

The advantage of using glass plates for making enlarged negatives, and other advantages and disadvantages of plates and films will occur to the reader.—Photo Times.

FLASHLIGHT PHOTOGRAPHY.

The most important rule is the position of the light and its proper diffusion. The work of the tyro is recognized by its harsh shadows and unnatural, staring look on the faces of the sitters. As a rule, persons have a dread of flash powder, and the strained look of expectancy may be avoided by setting off a small preliminary flash, of course with the lens closed. Instantly the set faces will relax, and if the flash proper is then immediately ignited, before the smoke of the first has settled, a pleasant picture will invariably result. The flashlight stare can be avoided by having the usual lights in the room burning full. The short time elapsing between uncovering the lens and igniting the flash will not impress any image on the plate.

In focusing a family group, or any such subject, in a parlor, care must be taken that none of the lights in the room shine directly into the lens, and that there is no mirror or other highly reflecting surface which will reflect back the flashlight.

It is not advisable, for safety or economy, to mix or experiment with new compounds. This has already been done and there is record of a few martyrs in the cause. There are several excellent and cheap flash compounds on the market; also flash sheets, which are convenient for small work.

Home portraiture, which is difficult at all times, is less so by flashlight. If the subject is sufficiently trained not to move between, it is advisable to ignite a small charge to one side and rather low down, to soften the shadows, and then a double charge slightly above the level of the head and a little to one side. If a piece of cheesecloth stretched on a frame is held between the flash and the sitter, the light will be sufficiently diffused without the double flash, but allowance must be made in the quantity of powder consumed for the loss of light passing through the screen.

In placing a subject or the figures in a group, do not have the faces turned directly toward the camera. This gives a flat result, as in daylight work. There are great possibilities in *genre* work by flashlight. The accessories of any room in the house are always convenient, rendering possible effects that could never be obtained by daylight. A long evening may well be spent in arranging, posing, and portraying willing members of the family in graceful attitudes among their natural surroundings. Such pictures can not fail to be interesting to friends, and if the work is skillfully done, and the picture made to tell a story, it will prove entertaining to those who are not acquainted with the subjects.

The quantity of powder consumed to properly illuminate any subject, is, like the timing of daylight exposures, best learned by experience. It is governed by the speed of the plate, the diaphragm, the distance and the color of the walls in the room. It is not necessary, as some advise, to ignite the flash behind the camera. If the lens is shielded by a hood, a cardboard tube, or a cone of paper, the flash may be made considerably in front of the camera, with a gain in illumination and economy of powder. There are some flash compounds, however, that scatter slowly burning particles in the air. These should be avoided, held so as to prevent the sparks falling in the line of the lens, or the shutter should be closed immediately after the flash.

In photographing an interior by flashlight, where there are no animate subjects, it is, of course, unnecessary to confine the operation to one flash. By arranging 2 or 3 small charges of powder around, so that the strongest light is from one side, it is possible to do work that could not be excelled by a well timed daylight exposure. In fact, it is possible to photograph interiors by flashlight that could not possibly be obtained otherwise.

For work in small rooms the flash sheet is to be recommended. It can readily be attached by a pin to a piece of protecting cardboard, and touched off with a taper. For general work the powder is best and cheapest. It is put up by various firms in little wooden boxes containing sufficient for an ordinary exposure. A fuse of celluloid or other substance attached to the box is convenient and safe; as a scorched hand will soon show that any flash compound can only be safely ignited at a distance. After some experience has been gained in the work, it will be cheaper and better to buy the flash powder by the ounce or pound. It can then be measured out according to the requirements of the subject.

There are numerous flash lamps advertised. Some are good, and one should be bought if much work is to be done. Such a lamp should be so constructed that it can be held at a safe distance or be conveniently placed on a stand. It should have a long, narrow pan, so the flame will be spread as far as possible, and a reflector back of the pan, which will also serve to shield the eyes of the operator. The appliance for igniting the powder should be never-failing in its action, and respond instantly to the touch. Flash pistols are good for several purposes, and they facilitate the taking of unexpectant subjects. They are like the snap shot hand camera compared to the tripod camera. As flash compounds give a white light of short duration, true color values are best obtained by an orthochromatic plate. Any plate that is of a high sensinometer number will, however, prove satisfactory. The negatives should be developed in a developer that is diluted with twice the usual quantity of water. This will help to bring out the fine details and counteract the tendency to harshness and extreme contrasts. There is no developer better for flashlight negatives than a weak pyro-soda solution, say 1½ grains of pyro to the ounce.—J. P. CHALMERS, in The Camera and Dark Room.

MORE LIGHT IN THE DARK ROOM.

Until recently I have found the one drawback to proper development in the insufficient light given by even the best of ruby lanterns and ruby windows. Deep ruby is about the worst light by which to develop to that exact point that will give the best printing results. Moreover, the light undoubtedly harms the eyes. I have used enough ruby light in my dark room to read the print of newspapers by, but to no purpose. The finer, more delicate points can not be well enough examined to permit of the best work. If I notice in a landscape that the foreground values do not compare favorably with those of the mid distance, I can apply the proper treatment if it is apparent. Similarly, if the mid distance is not in harmony with the foreground and distance, that matter is readily changed during development if one can see what is going on. I do not like to be compelled to reduce here and there or intensify or doctor the negative with tissue on account of poor perspective, when, if the dark room light were adequate, I could have obtained a perfect negative without such extra work. Such a negative is worth having; one that, bar a few touches of spotting here and there, affords a faultless print. I read that certain dyes, light in color, were, nevertheless, perfectly non-actinic, and that a solution of them used in a tank before the light would afford sufficient light, not so deeply red as the ordinary ruby glass. Following up the idea, I secured some eosine and metanil yellow. Eosine is far the best red, as it is paler than aurine or erythrosine, yet is safer than either of the other darker reds. A weak solution of eosine, with a fair amount of metanil yellow, will make a light filter that fully answers the most exacting dark room requirements, save when color sensitive plates are used.

First, a tank for the front of the lamp must be had. I made one readily by separating 2 glasses with half-inch wood strips and making tight with a glue called seccotine, which any druggist can supply. To make sure of my work, I heated the edges of the tank and melted yellow beeswax into the joints. The tank has never leaked, and being filled with solution, with a little melted paraffine poured on top, it does not evaporate much or fade appreciably. The solution may be renewed about 6 times a year for safety, and the tank should always remain in the dark room, as otherwise the color will fade. The tank fits close to the front of the dark room lamp, or on the front of a light-tight box having a good lamp within and proper ventilation. No ruby glass is used, of course; the tank, or filter, takes its place. The solutions used are as follows:

For very brilliant light, safe ordinarily at 2 feet from the tray:

Eosine	¼ grain
Metanil yellow	6 grains
Water	40 ounces

A less brilliant one:

Eosine	¼ grain
Metanil yellow	3 grains
Water	24 ounces

If one feels the need of something not so pale, though a trial will prove the above are safe, as much as ½ grain of eosine, 6 grains of metanil and 24 ounces of water may be used; but the pleasure of working in a light where one can really see the true strength of the various parts of the negative is too great to spoil by returning to the deep reds. Those who will lay aside all distrust of the light solution will find comfort and great improvement in their work by taking it on trial. Paper stained with the same solutions would appear to work as well, but a friend who preferred to try it that way soon adopted the glass filter as far the best. Have the body of the solution a half-inch thick, and it will be about right and wholly safe. I hardly need add that the thicker the filter, the farther apart the glasses holding the solution, the less will be the resulting light.—B. W. Wordsley in Photo-American.

EXPOSURE WITH YELLOW SCREENS.

It is particularly during August and September that, for landscape work at any rate, the enormous value of the orthochromatic plate and color screen manifests itself. In spring and autumn the great beauty of the landscape lies not in the thickness and luxuriance of the foliage as in summer, but in the exquisite tints and delicacy of coloring which differentiate between the various trees and shrubs.

One of the questions oftenest asked is this: Is there any advantage in using a yellow screen with an ordinary plate? No; it is possible to use them, but hardly practicable.

An orthochromatic plate by itself will be found a great improvement on the ordinary plate for most landscapes in spring. When used with a suitable color screen the improvement is carried further.

The correction, however, must not be overdone. A screen that under ordinary circumstances gives the best result when copying oil paintings, especially those of a pronounced yellow tint, is not usually the best to employ on landscapes. The reason is obvious. In landscape, the truer the rendering the better. In copying an oil painting such as described, the photographer often requires not merely to reproduce the painting truthfully, but to counteract and remove a fictitious yellowness, which is as much a drawback to the painting as it would be to the photograph.

For this reason, then, a pale yellow screen rather than a deep one, is best for landscape work. There are plenty of differ ent kinds on the market; among them the photographer can choose that which best suits his immediate purpose.

He will be well advised if before using it in the field he makes a series of careful tests to give him a clear idea of the extent to which the screen increases the exposure necessary. This is an important point, because great discrepancies are found between the increase as stated by the maker and that actually required by the screen.

Tests are best made in duplicate, in the middle of the day and just before sundown. Considerable difference will often be found between the 2.

A good general idea of the behavior of a color screen with any particular make of plate can be obtained by selecting some ordinary landscape subject and exposing one plate on it in a series of strips, pushing the shutter of the slide in between each exposure. Such a stop may be inserted as to make exposure thoroughly manageable, say f/32 or f/45. The exposures to the different parts of the plate, each of which should be double the preceding, may be so arranged as to bring the correctly exposed part somewhere in the middle of the series. Thus, if 2 seconds would be about right, then ½, 1, 2, 4, 8 and 16 seconds may be given. Immediately afterward a second plate should be exposed, but with the color screen interposed. The exposures in this instance may also double, the middle exposure being as nearly as possible as many times the correct exposure without the screen as its maker recommends.

Thus, in the case given, in which 2 seconds was about right without the screen, we should give, with a screen which the maker claims requires 4 times the exposure, 2, 4, 8, 16, 32 and 64 seconds. The 2 plates should be developed side by side in the same dish for the same time, fixed, washed and compared. They will show at a glance the exact effect of the use of the screen so far as prolonging the exposure is concerned.—Photography, London.

*PHOTOGRAPHING A CHIPMUNK.

In taking the photo entitled "Meddling with Danger," I had a few interesting experiences. I tried nearly every day for more than a week before I could get the chipmunk in the act of going into the trap. I set the trap and baited it, then set my camera up about 4 feet from the trap and covered it all with leaves and branches except the lens. I had a tube about 20 feet long. I lay down and covered myself partially with branches, leaving an opening to look through. After waiting an hour, without getting the chipmunk where I wanted him, I exposed a plate to learn the correct timing. The next day I came and after 1½ hours' wait, succeeded in getting the chipmunk in position. I went home much elated, to find on development that the picture was many times under exposed; being a different kind of plate, but supposed to be the same speed. I was then determined to get that chipmunk's picture and I kept going every day. Sometimes he would come out and run all over the wall without going near the trap. Then he would sit motionless in one position 15 or more minutes, but not where I wanted him. He became suspicious of the pile of branches, as I was so cramped I would sometimes have to move.

Once, after a long wait, he came out and was working my way, when along came a big stray cat. In went chippy with a chirp and didn't come out again that morning. I didn't say anything, but I wished I had my rifle for that cat. Once a few crows discovered my concealment, and in 5 minutes no less than 25 were flying around, darting down to see what the trouble was and making an awful racket.

One night my trap was stolen and I found it beside the road, broken, about half a mile distant. I repaired it and still had hopes. The next night the trap was gone for good and I had to make a new one, which I carried back and forth with me. While lying in wait I made the acquaintance of a red squirrel and a blue jay, which I saw every day. Finally, one day after waiting 2½ hours, and being nearly frozen, I managed to squeeze the bulb and get the picture of which you have copies. I find much more satisfaction in this picture than in one which is easy to get and where there are no obstacles to overcome.

Harry G. Higbee, Hyde Park, Mass.

SUGGESTIONS.

Red spots on platino paper may be removed in 2 ways. If they are not bad, incline a tray slightly, lay the print with the streak or spot toward the incline. Place a lump of hypo on it and, with your finger, a few drops of water on that. Keep it moving occasionally and the spot will gradually be eaten out. The other, and perhaps best way, is to make a weak solution of cyanide of potassium, and remove by either applying locally or immersing. If you have a print too dark, cyanide makes an excellent reducer. If the solution is strong it will work on a trifle after it is removed to the water. This should not affect the permanence of the print, as it only eats off the metallic platinum or gold. This process is intended to be used after the print is fixed.

Cyanide of potassium is an excellent plate

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* See page 258.

reducer. It does not leave that smooth surface to the film which is so hard to stipple. Care should be used with it, as it is a violent alkali and deadly poison. Even its fumes are unhealthful.

Too much care can not be exercised in cleaning lenses, for even with the greatest precaution scratches are made and they undoubtedly impair the speed. An astonishing number of them appear in an enlarging camera where electric light is used. There are millions that are not apparent under other conditions. Silk handkerchiefs may be all right for cleaning a lens, but it is almost impossible to leave a scratch when a piece of absorbent cotton is used, and it cleans more thoroughly also. Any lint that is left can readily be removed with a soft camel's hair brush.

The simplest way to keep developing solutions at a normal temperature is to heat water, put it in a tray the size of the one you use to develop with, and when ready for work keep the last mentioned sitting in it. By heating both trays before use sufficient heat can be kept in the developer to bring up any negative.

To avoid too great contrast use the metol pyro formula that comes with the plate. Develop with the metol until the image is well out, then add the pyro to give the strength. They will bring out all there is in the film.

Professional and Amateur Photographer.

SNAP SHOTS.

One cloudy day while printing, I decided to make a transparency from an unused end of roll film. It was not my intention to make anything especially good. Hastily selecting a glass plate, I placed it in a frame and put in the film as one would place the paper. This I did in the dark room. I then placed the frame in weak daylight and left it 8 or 10 seconds. It was quite a surprise to find on development that the film was an exact copy of the original negative, excepting not quite so sharply cut. Can you tell why it was a negative instead of a positive, as one would naturally expect? W., Ulrichsville, Ohio.

ANSWER.

An exposure of 1 second to a lighted match held 2 feet from the holder would have afforded you a positive. Where great overexposure is given, as you gave, a negative from a negative or a positive from a positive is the invariable result and the well known fact is commonly resorted to by all who have plates to duplicate.—Editor.

As the snows of winter come anew, my troubles begin. I can not get a good view of the mountains' snow covered tops. The sky will not be white. The mountains are not distinct. The toning does not seem to do its work or is the fault with me? The print I enclose, I took about 10.30 a. m. with a fair, bright sun shining. The stop was down to 64 and I gave 15 seconds' exposure. I made 3 exposures that day under similar conditions, the results being nearly the same. Later I made 3 exposures with an Al Vista front attached on Eastman films. The weather conditions were similar and results were about the same, only I used a much larger stop. The tops of the ranges and the sky are nearly the same color.

C. N. Truman, Ouray, Colo.

ANSWER.

You have overtimed the plate and have not developed enough. When you think your plates are developed, leave them in 5 minutes longer. It will be good for them.—Editor.

Will you please publish a formula and directions for coating silk or other cloth with blue print emulsion? Mrs. W. S. Wands, Oakland, Cal.

ANSWER.

The simplest way to sensitize the cloth is to immerse it till wet through in the blue print solution, wring out and dry while stretched. Sensitizing and drying must be done in dim light or by gaslight at night. You can buy 12 tubes of perfect sensitizer for blue print work for 50 cents from E. W. Newcomb, Bible House, New York City, or if you prefer to make your own, use 64 grains of ammonia citrate of iron in an ounce of water, 48 grains of red prussiate of potash in another ounce of water and when fully dissolved, mix the 2. Martin's silk solutions are best for silk but they afford brown and black tones only.

I note the prize winning photo, "Resting," in February, 1902, Recreation. Do you intentionally print photos of game killed or crippled out of season, or does the New York law permit one to kill deer during the summer? If you will examine the photo carefully and read the article regarding it in the photo, department I think you will agree with me that this buck was killed during the latter part of July; certainly not later than August. His horns are in the velvet, and he has the short summer coat. Note the wrinkles in the neck.

A. E. Hammond, Darby, Mont.

Will Mrs. Kirschner please explain?—Editor.

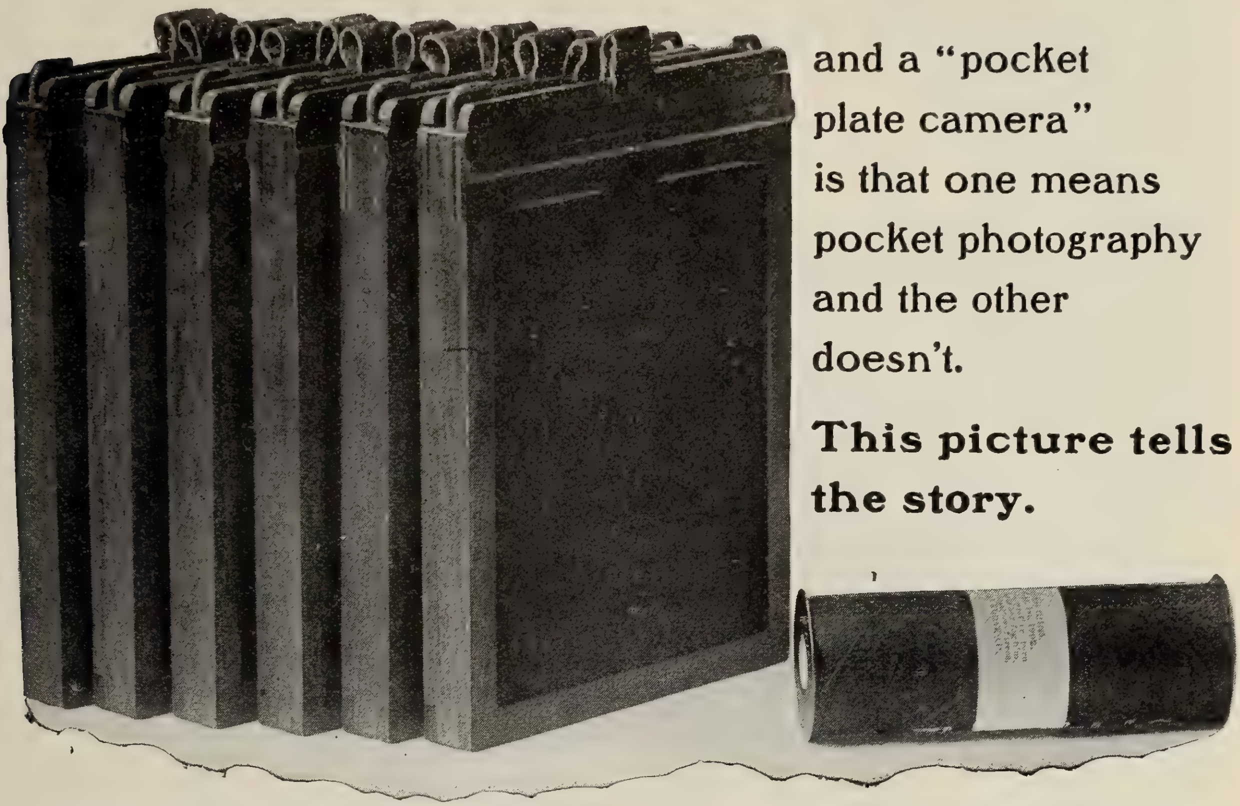
Photographers are again reminded that they should always write their names and addresses on the backs of pictures which they send to this office. Valuable photos occasionally come in here without any clue to the identity of the maker, and a great deal of trouble might be saved if the amateurs would, in all cases, take the precaution to sign their pictures.

The difference between a

Folding Pocket Kodak

and a "pocket
plate camera"
is that one means
pocket photography
and the other
doesn't.

This picture tells the story.



1 doz. 3¼ x 4¼ glass plates and holders for same.
Weight, 1 lb. 12 ozs.

Kodak Cartridge containing 1 doz. 3¼ x 4¼ Films.
Weight, 2 ozs.

Pocket photography was only made possible by the Kodak film cartridge. Not only does the Kodak go inside the pocket, but inside the Kodak goes the film—all becomes one compact, self-contained mechanism.

A No. 3 Folding Pocket Kodak, including its load of twelve exposures, weighs less and takes less room than an equivalent in glass plates and their holders—**to say nothing of the weight and bulk of the "pocket plate camera" itself.**

Kodaks load in daylight—plate cameras require a dark room.

Kodaks $5.00 to $75.00.

atalogue free
t the dealers
or by mail.

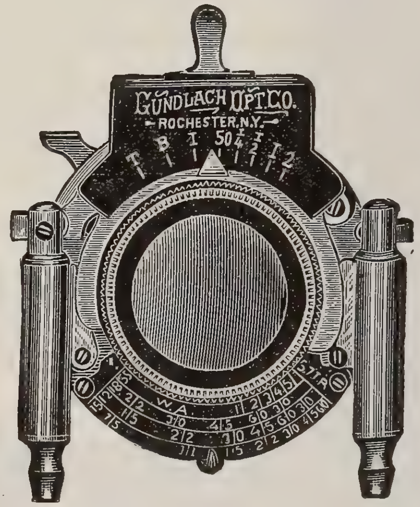
EASTMAN KODAK CO.

Rochester, N. Y

IT'S ALL IN THE LENS

The Value of a Camera

IS IN THE LENS



THAT'S WHY

Korona Cameras

ARE BETTER
THAN OTHERS.

We have been makers of high-grade photographic Lenses for 18 years, and as practical opticians fit our Cameras with the Lens most suitable for the needs of the photographer.

We make KORONA CAMERAS complete in every detail in the best equipped camera factory in the world, and as Camera Lens and Shutter are all made under our supervision the finished product cannot but be better than if they are the nondescript product of different makers assembled together in one instrument.

A Camera manufacturer who does not make the Lens puts the reputation of the Camera in the care of the Lens manufacturer, who is a disinterested party.

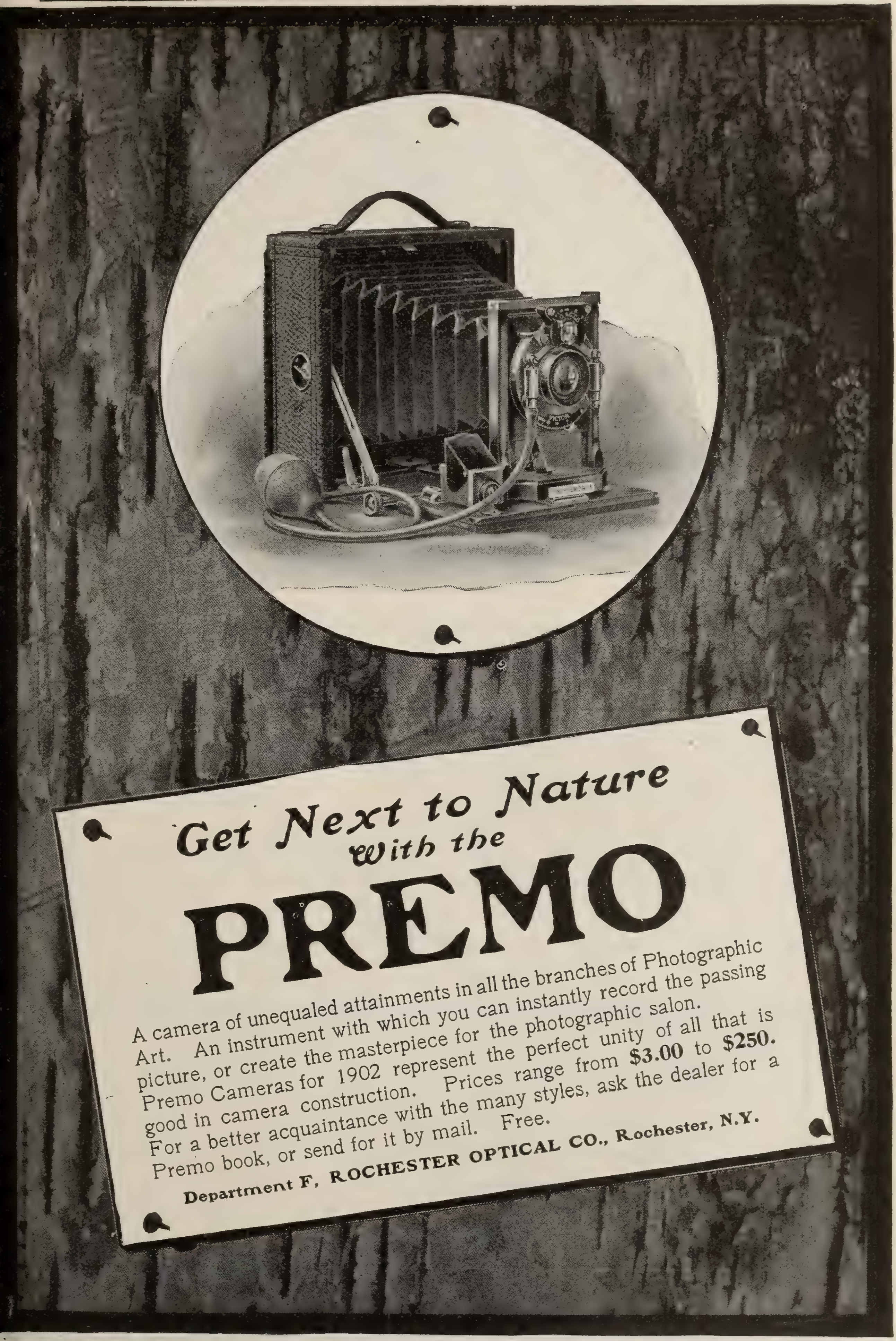
If you want a good Lens,

Buy a Korona.

Send for catalogue and mention RECREATION.

GUNDLACH OPTICAL CO.

Rochester, N. Y.



Get Next to Nature

With the

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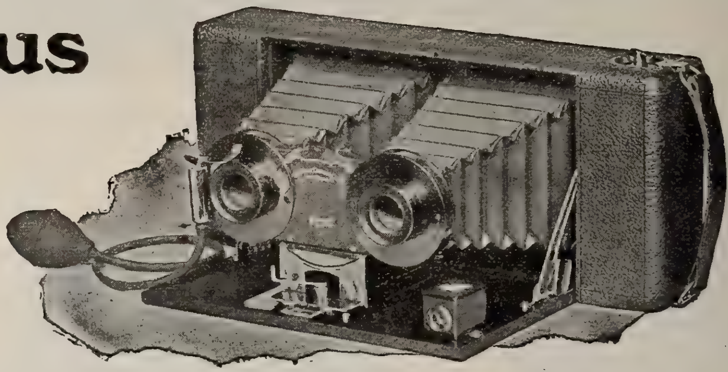
A camera of unequaled attainments in all the branches of Photographic Art. An instrument with which you can instantly record the passing picture, or create the masterpiece for the photographic salon. Premo Cameras for 1902 represent the perfect unity of all that is good in camera construction. Prices range from **$3.00** to **$250.** For a better acquaintance with the many styles, ask the dealer for a Premo book, or send for it by mail. Free.

Department F, ROCHESTER OPTICAL CO., Rochester, N.Y.



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is a complete stereoscopic outfit of the highest type in pocket form. Fitted for regular 3¼ x 4¼ cartridge film, has brilliant finder, automatic iris diaphragm shutter and double rapid rectilinear lenses, accurately matched, guaranteed to produce perfect perspectives.

Price Complete, $25.00.

Hawk-Eye Catalogue free by mail. BLAIR CAMERA CO., Rochester, N. Y.

I am a regular reader of RECREATION, and enjoy especially the notes on guns and ammunition. I used to find pleasure in any shot if I only made a kill, but now I prefer the more difficult shots even though I miss. I always load my own shells and am satisfied I can so obtain a better pattern than with any of the moderate priced factory loaded shells. My favorite load is 2¾ drams Dupont smokeless powder in Leader shells, with one nitro card, one ¼ inch black edge and ¼ inch salmon felt over the powder, and 1⅛ ounces chilled shot with a C card wad on top. I should like to know how others load their shells.

V. G. F., Washta, Ia.

I am glad to see that Wm. Read & Sons, of Boston, advertise in RECREATION. They keep a complete line of sportsmen's goods, and are thorough sportsmen themselves, so you can depend on whatever they say.

J. G. Livingston, Somerville, Mass.

The Harrington & Richardson single gun you sent me as a premium for subscriptions is all right. I have given it a thorough test and find it a strong, close shooter. F. B. Kitts, Los Angeles, Cal.

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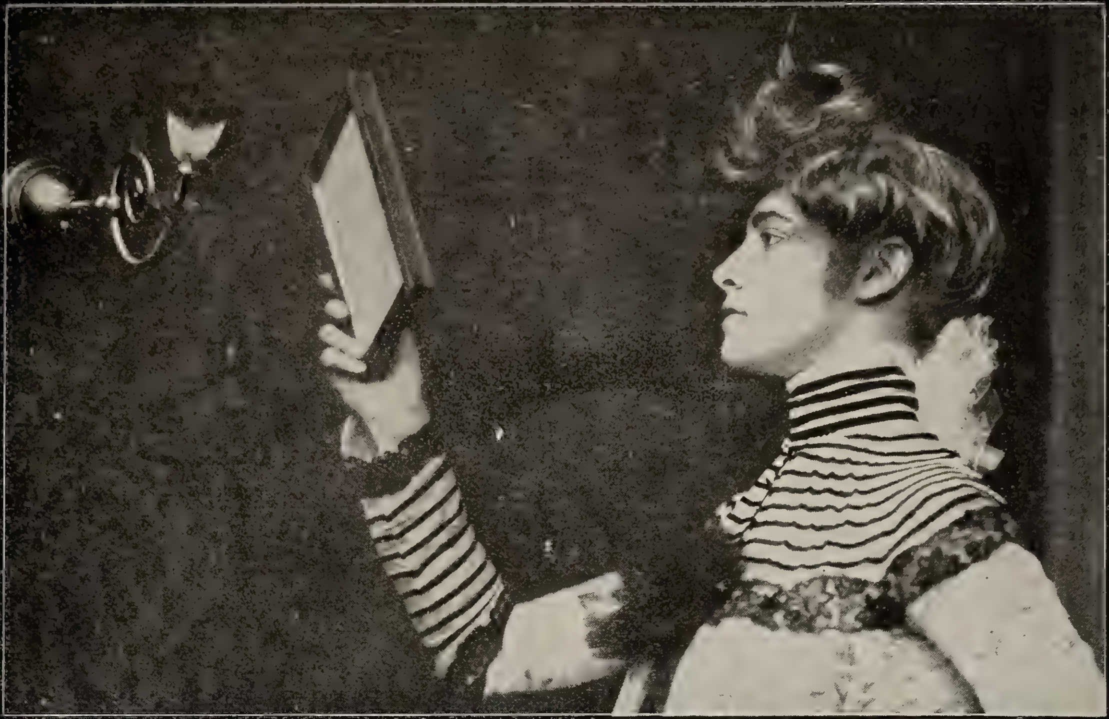

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1 Cycle Graphic, 5x7, fitted with Zeiss series II A lens, B. & L. Iris Diaphragm Shutter, as good as new for $50.

1 Long Focus Reversible Back Graphic, without Lens and Shutter, 6½x8½, as good as new, for $25.

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75 do in 5 x 7, for 39c each.

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If they become soiled or mussed, can be washed in cold water (no soap), and ironed with a clean hot iron. Designs include Official Photos of Pan American Buildings and Niagara Falls. Sent by mail. Sensitized Prepared Cloth, with full directions for printing from your own negatives, sent by mail at $1 a square yard; 50c. ½ yard.; 35c. ⅓ yard.

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FREE To everyone who will send in a subscription to RECREATION through me I will give, free, a photo of the late President McKinley; or of the Esplanade, or any of the buildings at the Pan-American Exposition. These photos are all on Velox or Aristo paper. The one of President McKinley was made September 6th, the day he was shot. All prints perfect. F. E. WILKINSON,
172 Woodlawn Ave., Buffalo, N. Y.

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ranges almost wholly above timber line and in the wildest, rockiest portions of

The Rockies and the Cascades

Few men in the country have ever been able to photograph this rare and interesting animal. One of RECREATION'S staff photographers did succeed in making some fine photographs of goats, and I have had

A Few Enlargements

made from the negatives. One of these shows two goats, broadside on. The other shows three resting on a narrow shelter of a perpendicular cliff. Two are lying down; another is standing up, headed away from the camera, but has turned and is looking back.

The two pictures make an extremely interesting series of studies of the white goat. These photographs have never been equaled in this line and probably never will be.

The prints are 10x12 in.

and are on white mounts 12 x 16.

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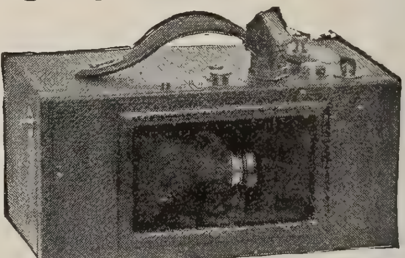

A whole range of mountains
A whole sweep of river
A whole army
A whole fleet of ships
A whole city

Or any other vast stretch of scenery or moving objects? THE SWING LENS DOES IT.

The AL VISTA

Is the thing. It lists at $30.

One of the greatest inventions of the age.
Given as a premium for 12 Subscriptions.

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The AL-VISTA Camera

GETS EVERY THING IN SIGHT

This Panoramic Camera

is the Highest Development of Photographic Science

IT IS a decided advance upon anything heretofore produced. The revolving lens sweeps from one side to the other, making a picture greater than your two eyes can see at one time.

Since we have adopted our co-operative, up-to-date plan for selling these cameras direct to the consumer, thousands have taken advantage of our offer. This plan permits you to buy the camera in small monthly instalments. You have the camera while you are paying for it. This shows our confidence both in our cameras and in human nature. :: *Write us for full particulars.*

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Photo by T. W. Ingersoll, St. Paul, Minn.

Every Sportsman
should have a

Reflex Camera

The only Camera adapted for taking sporting and game pictures.

Write for Particulars
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Reflex Camera Co.
YONKERS, N. Y.

The old man had returned to the home of his boyhood for the first time in 10 years or more, and, as on the last occasion, he had written "and wife" after his name on the hotel register. Of course the keeper of the hotel was glad to see him, and grasped him warmly by the hand.

"Ain't grown a day older than when you was here last," he said.

"No?" said the old man, half inquiringly.

"Not a day," returned the tavern keeper, emphatically. "Your wife seems to have changed more'n you."

"Yes?"

"Oh, yes; leastways she does to me. Looks thinner than when you was here last."

"Indeed?"

"Yes. She ain't near so fleshy as she was, accordin' to my recollection. Seems like she's taller, too, an' her hair don't look just the same to me, an'—an'——"

"And," put in the old man, softly, "she's not the same wife, you know."—Boston Journal.

I should be glad to hear through Recreation from someone who has used the Savage 30-30 rifle. Have seen a great deal in praise of the Savage .303, from those who use it, but do not remember having seen anything about the Savage 30-30. Is it as accurate and effective as the 30-30 Winchester? In what way is the .303 superior to the 30-30? I notice that the Savage Arms Company does not say much about their 30-30 rifle in their catalogue or in their advertisements; why is this? I am greatly pleased with what I know of the Savage rifle; but think I should prefer a 30-30 to the .303, if it is as good as the Winchester 30-30. The gun and ammunition department of Recreation is the best department of the best magazine published.

A. G. Bevan, Martinsburg, Indiana.

Free: I will print 50 visiting cards for any one who will send me a subscription to Recreation, accompanied by $1. Send stamp for sample card. D. J. Finn,
West 184th St., & Broadway, New York.

A Good Formula Free To save plates use a Wager Exposure Scale. It tells you the correct exposure in every case, and saves its cost in a month. No sensitized paper, no multiplying in the head—that's a nuisance, and besides you may make a mistake. Endorsed by the Editor of Recreation. Post free, 50 cents. Aluminum $1.00. Your money returned if you don't like it. Send a postal for our Booklet No. 5, lots of hints and formulæ.

Wager Exposure Scale Co., Box 539, **Philadelphia, Pa.**

BIRDS AND DEER IN TEXAS.

Chicken shooting last year was poor, as the floods in June and July killed the young and spoiled the eggs. Within about 15 miles of Houston some of the best shooting was had. There were some fine coveys seen near Deer Park. One thing that helped the chickens last season was the mosquito plague, which made many hunters stay at home and many others come home. We are blessed with an abundance of quails within a radius of 25 miles. Christmas a party of us drove out after 2 o'clock and killed 18, and New Year's day we killed 34 birds. Duck shooting was splendid on the bay and lakes near town. Canvasbacks were rather scarce. Mallards, teal, sprigs, black ducks and gray ducks were seen by the thousand. They can be had only with decoys and a good blind.

Deer were more plentiful than usual. Many fine hounds are kept here. This country is thickly covered with brush and palmetto, and only with hounds can deer be killed. One party during the open season got 20 deer from a thicket 15 miles from town. They own a fine pack, and the hunters are old timers, following the hounds through any thicket on horseback. The law against shipping from one county to another has helped us much, and next year's hunting will be extra good.

C. L. Bering, Houston, Tex.

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Fits Any Lens **Precise as a Watch**

This new shutter does anything the photographer can ask of it automatically; any desired exposure from Express Trains, Athletes and Race Horses to Time Exposures. The Smallest, Best Made, Most Scientific. All working parts enclosed.

Volute Shutter and Bausch & Lomb-Zeiss Anastigmat or Plastigmat Lens is an ideal combination for your camera.

Send for descriptive Booklet.

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Many **Photographic objectives** are offered under the guise of **Anastigmats,** yet only a very few are actually equal to their maker's claims. The name **Anastigmat** is a **misnomer** as applied to any but a **perfect lens.** Anastigmatic has only one meaning,—"free from astigmatic aberration." A lens of this ideal type is our

VERASTIGMAT

(TRUE STIGMAT)

The **Speed** (actual,—not nominal) is, F-6.8.
The **Construction** embodies the practical execution by methods of the utmost scientific precision, of the conditions prescribed by the most rigid requirements of the theories of advanced optics.
The **results,**—well, we prefer to have you judge for yourself,—for after all it's results which chiefly interest you. Make a comparative test,—we'll supply a Verastigmat for the purpose.

MANHATTAN OPTICAL CO. of N. Y.
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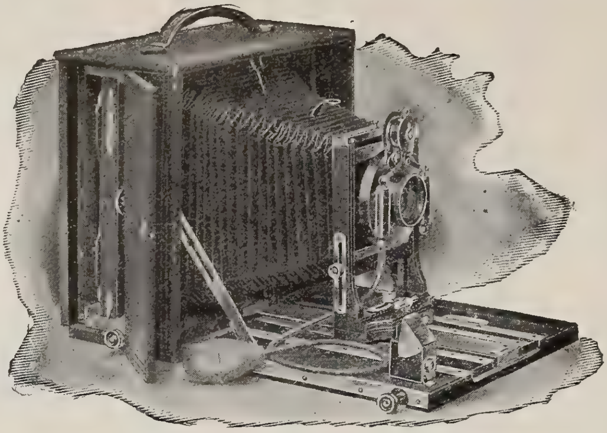

1902

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Are the *finest* in the World

A broad statement, but just ask your dealer, or write us for a copy of our new catalogue and you will understand why.

CENTURYS have more exclusive, practical and original features than any other line in the market. Ten different models from $9.00 to $100. The Century catalogue for 1902 is free—a postal request will bring it.

CENTURY CAMERA CO.

Dept. R. **Rochester, N. Y.**

Once upon a time 2 young men and 2 young women were playing whist, and quite frequently one of the young men and one of the young women found that their fingers were entwined under the table out of sight.

This finger contact did not in the least disconcert them. In fact, they appeared to enjoy the play much more than did the other young woman and young man.

Moral—The enjoyment of the game depends on the hands that are held.—N. Y. Herald.

I will send by registered mail, post paid, 50 5x7 views printed on either Vinco, Solio or Velox paper, and mounted in a Buechner album, for $8. These views are of live and dead game, mountain scenery, lakes, waterfalls, fishing scenes and park views. A sample print will be sent for 15 cents in stamps.

S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—EDITOR.

Hunters and Travelers Should Use

BUENA Self-Developing PLATINUM PAPER

No chemicals. No trouble. Nothing but water needed to obtain good pictures. Our "PURO" Gelatin paper (insoluble) is uniform, reliable and easy to manipulate. Will tone well in any good gold bath. **Perfect Results with both these Papers Guaranteed.**

Sample Orders filled as follows:
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Are You an Amateur Photographer?

If so, you need a View Album.

Send me 2 yearly subscriptions to RECREATION and I will send you a Buechner metal back view album, size 8 x 11 inches, hinged at end, listing at $2.50, and holding 100 4 x 5 views, or 50 6½ x 8½ views.

For 3 Yearly Subscriptions to RECREATION I will send you a metal back view album with 50 leaves, holding 400 4 x 5 views. Either album can be increased to any size desired, and at nominal expense, by inserting extra leaves.

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Made in three surfaces,
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Send 20 cents for trial dozen,
4 x 5 size, with developer.

IF you are open to conviction and would like to get better photo paper for less money than you now pay, try these papers, or if your dealer cannot supply you, send for prices and information to

The ANTHONY & SCOVILL CO.
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THE BEST
SUNLIGHT PAPER
MONARCH
TRADE MARK

THE DEER AND THE HUNTERS.

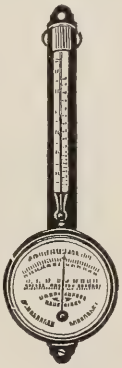
Once upon a time some deer in the woods of Maine were in conversation.

"Providence is not just to us," said one of the younger ones. "Our swift legs are our only hope, and even with them the hunters can overtake us with their much swifter bullets. Where is our protection?"

"Don't talk so foolishly, child," answered an aged buck. "Look about you in the woods and you will see many dead hunters who have fallen by the rifles of their companions. Our case is not so hopeless as it may appear to one with little experience."

Moral: The bane often carries its own antidote.—N. Y. *Herald*.

FREE DESCRIPTIVE BOOKLET ON HUMIDITY.



The Polymeter is an instrument to measure the percentage of relative and absolute Humidity.

Invaluable in testing the air we breathe, whether too dry or too moist.

Indispensable in forecasting rain, storms, frost or clear weather.

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Practical, Reasonable

So constructed as to add very little weight or bulk to the outfit.

For Further Information and Circular,
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C. P. GOERZ OPTICAL WORKS
Room 27, 52 E. Union Square, New York

SHEEP CURSE IN JACKSON'S HOLE.

Grovont, Wyo.

Editor RECREATION:

It is really discouraging work to have charge of the game of Wyoming. The funds are insufficient, and at present utterly exhausted. There is nothing to warrant me in putting a sufficient force in the field to prevent all violations of the law, especially as we receive no assistance from our county attorneys or justices of the peace. We have made several arrests with sufficient evidence to commit offenders. The result in some cases has been a conviction and a fine; this latter remitted and defendant turned loose. In other cases, a jury trial, when offender invariably has been found not guilty. Our county officers are not in favor of the present system of the disposal of the license proceeds, and hinder in every way the enforcement of the law, even forbidding the county attorney to give advice or to prosecute.

I frequently receive communications censuring the administration of this office, but they come invariably from persons who lack nerve and manhood to swear out complaints in cases of which they claim knowledge. I wish you would come here and judge conditions for yourself. You would find we are doing all that is possible with the limited means at our command.

The most serious thing that at present confronts us regarding the preservation of our game and forests, is the sheep question. Sheep have, for several years past, gradually approached this part of the State, until this summer has actually seen these pests within the boundaries of Jackson's Hole. The forests are burning in the wake of the herds, and in some instances the herders are setting fire to the timber ahead of the bands, so as to obtain good grazing next summer. It is a fact that all kinds of game will shun a locality infested with sheep. If we can not stop sheep from pasturing on the timbered mountain ranges in the West, we will soon need neither game wardens nor game laws. The Indians with their wanton killing for hides and the white market and head hunters have never done our game the damage that the sheep will do. The residents of this locality are assuming the same attitude toward sheep men, as they did in the past toward the Indians; with what success time will tell.

I think, if all timber land could be set aside as forest reserves, properly patrolled by men in the federal employ, and sheep positively denied the privilege of grazing on such reserves, an important problem regarding game preservation would be solved. I will write our senators regarding this subject. RECREATION can do an immense amount of good by bringing this matter before the public.

Albert Nelson.

CHANGES IN OREGON'S GAME LAWS.

After tinkering with Oregon's game laws for nearly the entire session of 40 days, the Legislature made some changes which, it is believed, will result in good. The wisdom of some amendments, however, is doubtful, and only time can determine whether or not grave mistakes have been made. These doubtful changes were made to appease certain interests that threatened to block game legislation entirely unless their demands were acceded to.

The sale of game is again permitted, but only during the last 15 days of the open season. This amendment was a response to the clamor of the farmers, who have an idea that they are feeding game animals and birds for the sole benefit of the city chaps. With the restrictions placed on the sale of game, and the limit placed on bags, it is not believed this concession to farmers and market hunters will result in any great destruction of game birds. The market can only be supplied during the last 15 days of the open season, when the birds have learned to keep out of the way of the gun. Dealers are required to keep a record of all game they buy, open to the inspection of the wardens. This record must give date of purchase, name of the seller and number of birds bought.

The old law protected elk until 1910. This was amended so as to make 1904 the first open year. The amendment was urged on the ground that white hunters would prove the most effective check on the Indians, who now are about the only violators of the law.

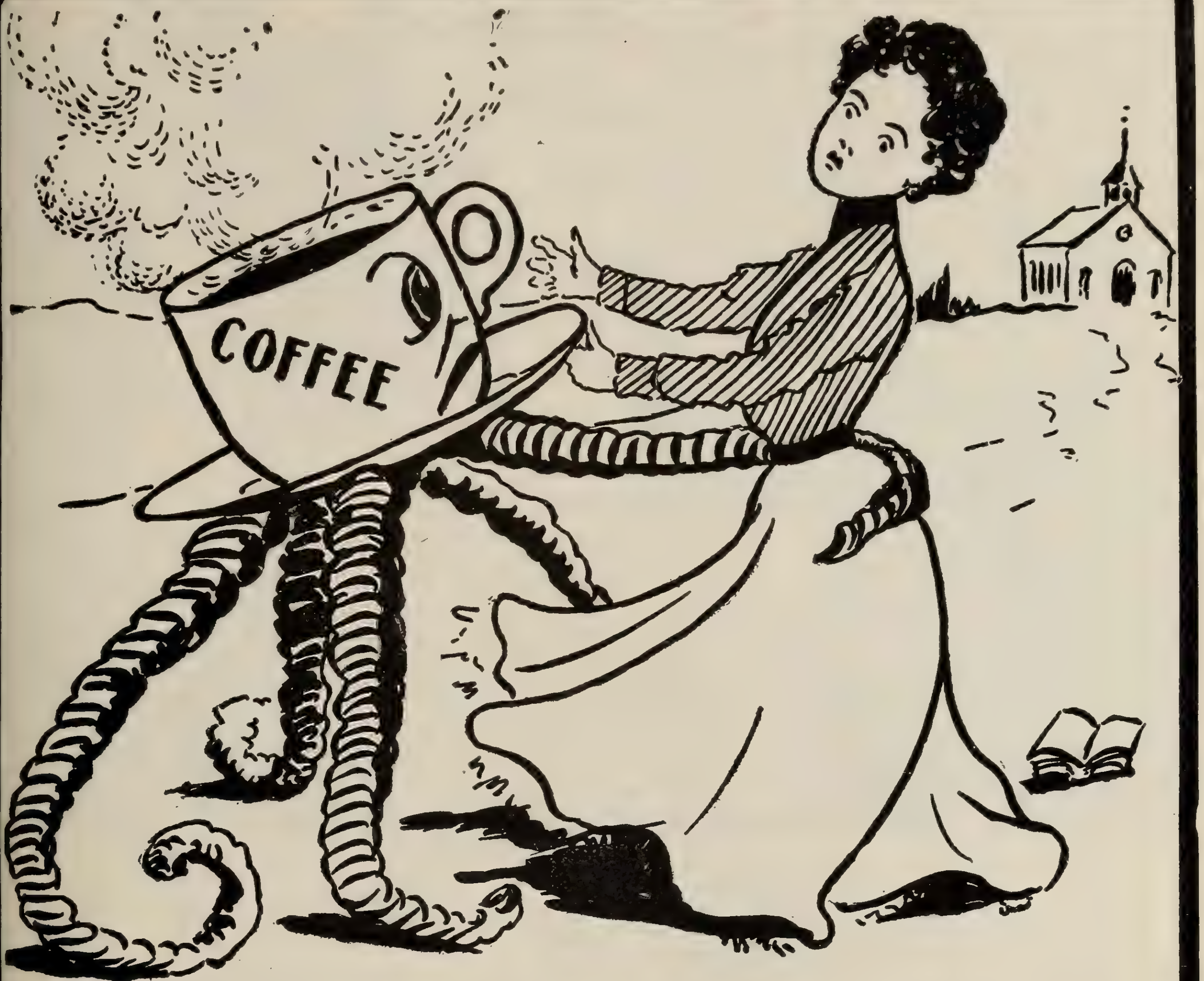
The law in reference to deer was changed by limiting the number that may be killed by a hunter to 5 a year, and provision was made for the tagging of hides by county clerks to enable the owner to have them tanned. The old law permitted the killing of deer but not the tanning of deer hides.

The new law limits the killing of ducks to 100 a week and 50 a day, and in some counties also prohibits their sale. Fifteen days were chopped off the open season in the spring. The provision of the old law establishing a closed season for jack snipe was cut out altogether. No changes were made in the open season for other upland birds.

The new law puts trout and other game fishes under the care of the game warden. The minimum size is fixed at 5 inches and the maximum catch at 125 a day. Salmon trout, believed to be the chief destroyer of salmon eggs and young salmon, are not protected.

The new law provides for a $10 non-resident market hunter's tax. No change is made in the salary of the game warden, but his deputy allowance is increased from $500 a year to $2,500.

Max M. Shillock, Sea Side, Ore.



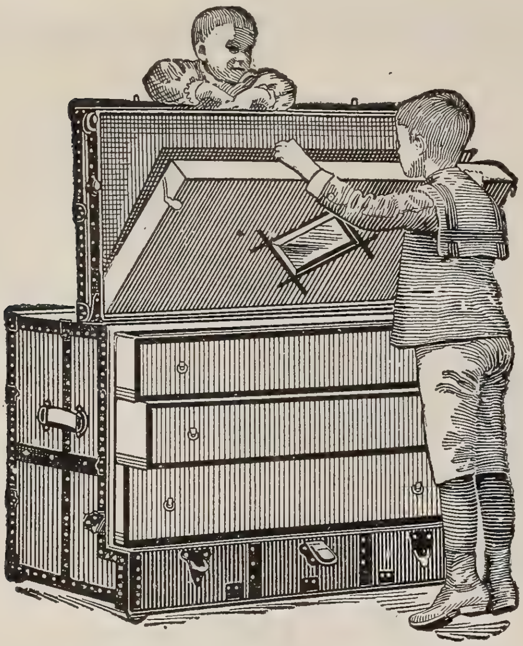
SCHOOL TEACHER

Pulled Down Hill.

"I relied on coffee so much to keep me up, having been told that it was a 'mild stimulant,' that I hardly knew what to do when I found it was really pulling me down hill. My sleep was badly broken at night and I was all unstrung, exceedingly nervous, and breaking down fast. My work is teaching school.

"When it became evident that I was in a very bad condition, I was induced to leave off coffee and try Postum Food Coffee. Mother made it first, but none of us could endure it, it was so flat and tasteless. She proposed to throw the package away, but I said, 'Suspend judgment until we have made it strictly according to directions.' It seems she had made the Postum like she always made coffee, taking it off the stove as soon as it began to boil. I got sister to make the Postum next morning strictly according to directions, that is, allow it to boil full fifteen minutes after the boiling begins.

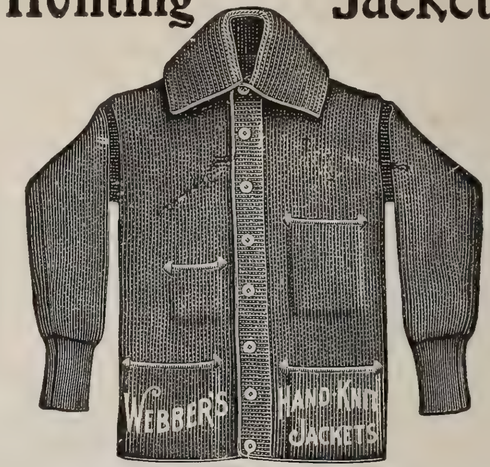
"We were all amazed at the difference. Sister said it was better coffee, to her taste, than the old, and father, who is an elderly gentleman and had used coffee all his life, appeared to relish the Postum as well as my little brother, who took to it from the first. We were all greatly improved in health and are now strong advocates of Postum Food Coffee. Please omit my name from publication." Flagler, Col. Name can be given by Postum Cereal Co. Ltd., Battle Creek, Mich.



Stallman's Dresser Trunk Have you seen one? It is up-to-date. Think of it, everything within reach. No heavy trays, but light, smooth drawers. Holds as much and costs no more than a good box trunk. Hand riveted, almost indestructible. Once tried, always recommended. Sent C. O. D., privilege examination. 2c. stamp for catalogue. Mention RECREATION.

F. A. STALLMAN,
87 W. Spring St., Columbus, O.

Webber's Hand-Knit Hunting Jacket.



Guaranteed all wool, seamless, elastic, close fitting, binds nowhere, warm, comfortable and convenient. Designed especially for duck shooters, trap shooters, etc., but suitable for all outdoor purposes, if warmth and other qualities are a consideration.

Made in Oxford Gray and Dead Grass colors. By express, charges prepaid, on receipt of price, **$4.00.** Send 5 cents for illustrated catalog in colors. Jackets and Sweaters.

GEO. F. WEBBER
Station A DETROIT, MICH.

If A. T. Wallace, who asks how to remove lead from a rifle barrel, will try mercury he will find it satisfactory. Wash the barrel with hot water. When dry plug one end. Pour in some mercury. Plug the other end and run mercury back and forth in the barrel 5 or 10 minutes. It will dissolve the lead and leave the barrel bright and clean. Never try to scour a gun barrel with emery powder.

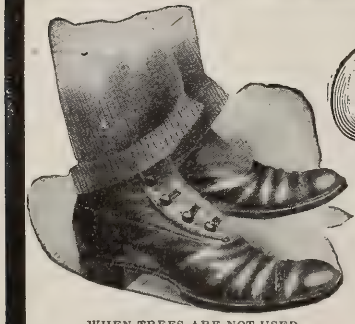
If A. G. Burg buys an Ithaca hammer gun listed at $19 to $21 he will make no mistake. I use a Stevens Favorite and can group the bullets in a 4-inch circle at 100 yards off hand, using 22 shorts.

Paul Mouser, Little Sandusky, O.

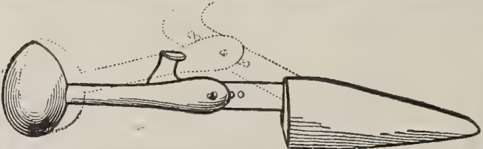
Speaking of queer shots reminds me of my experience last summer, while on the way home from the mountains. I saw a fox run up the side of a hill with a quail in his mouth. I took a snap shot at him just as he turned to go over the the ridge. He rolled down the other side, where I found him. The ball, a 30-30 soft nose, had broken both hind legs and one of the front ones.

W. R. Jackson, Pasadena, Cal.

I have been a reader of RECREATION for several months. Two doses of it killed the game hog in me. W. E. Sturgis, M. D.,
Clarksville, Texas.



WHEN TREES ARE NOT USED



WHEN TREES ARE USED DAILY

WHEN HUNTING

you will appreciate the difference made to your shoes if you keep them when not in use on **LEADAM'S SHOE TREES.** It is economy. Wet shoes dry in shape. The sole is flattened; the leverage does it and holds it. You need never force your feet into curled-up shoes again. Do not accept hinged lasts or other substitutes. *Ask your dealer for them by name,* which is on every pair. For men and women, $1.00 per pair. Illustrated booklet on "The Care of Shoes" free. Money returned if not satisfactory.

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No, that is not the kind.

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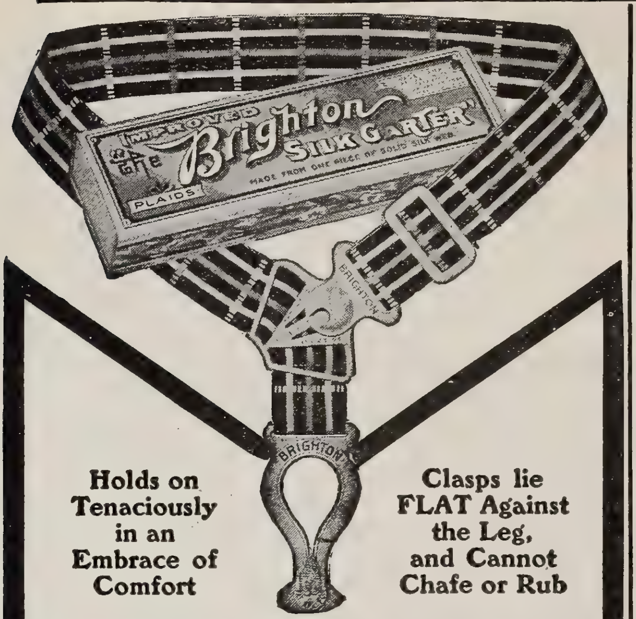
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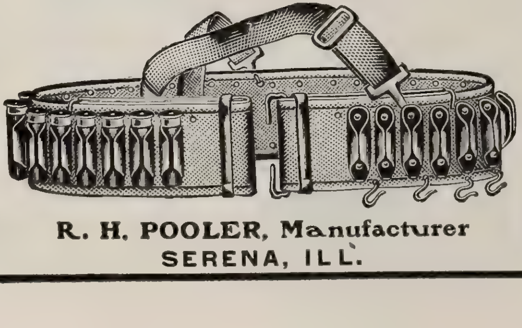

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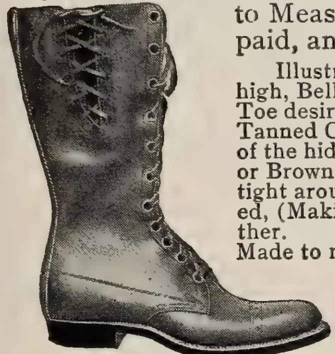

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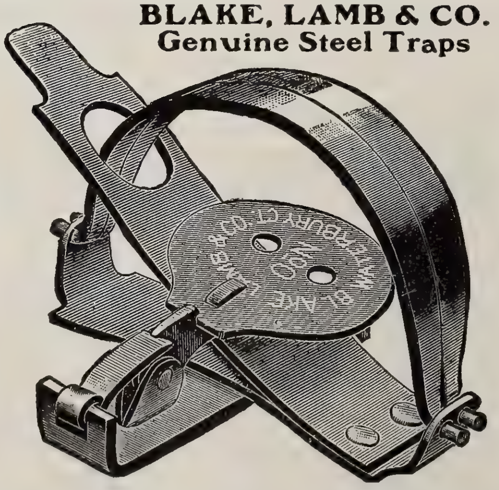
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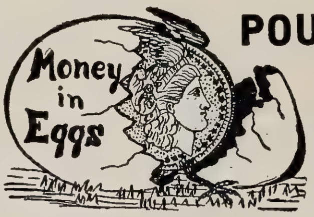

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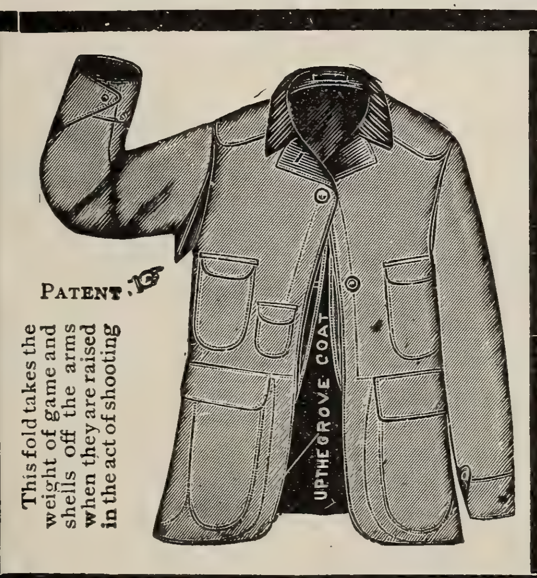
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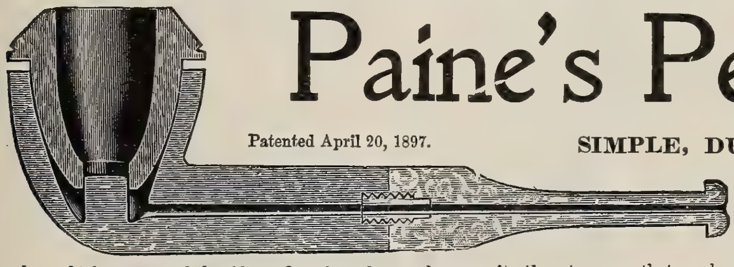

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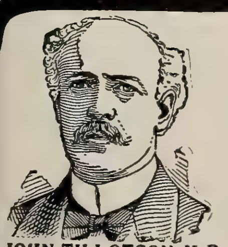

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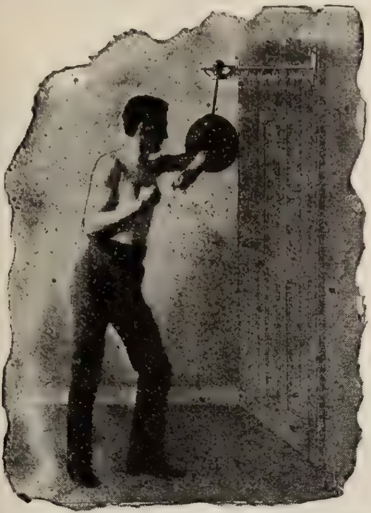

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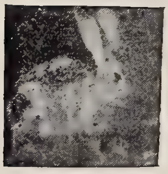

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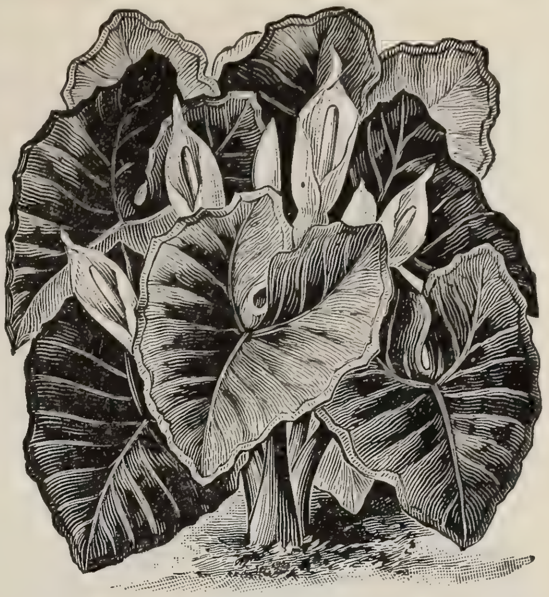

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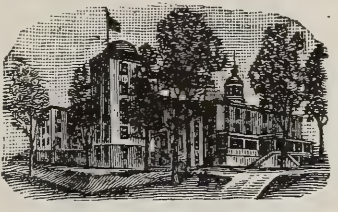

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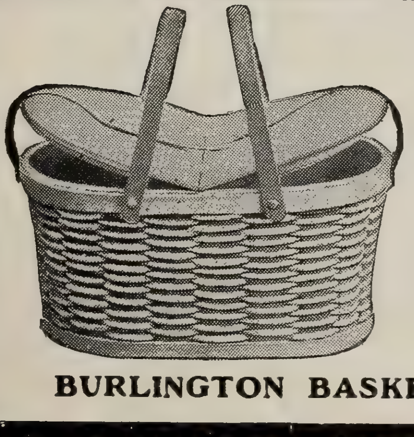

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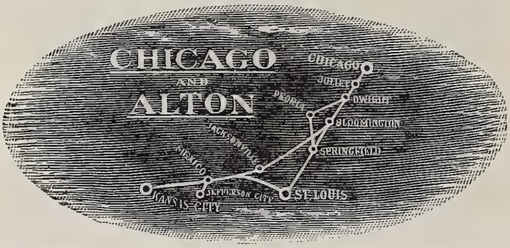
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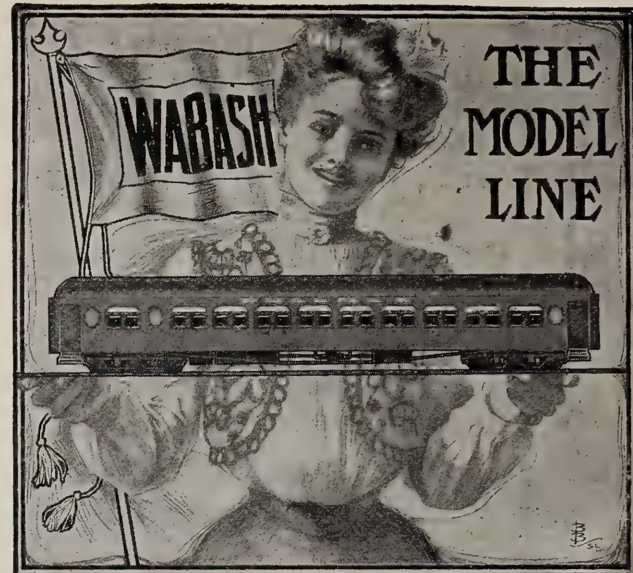
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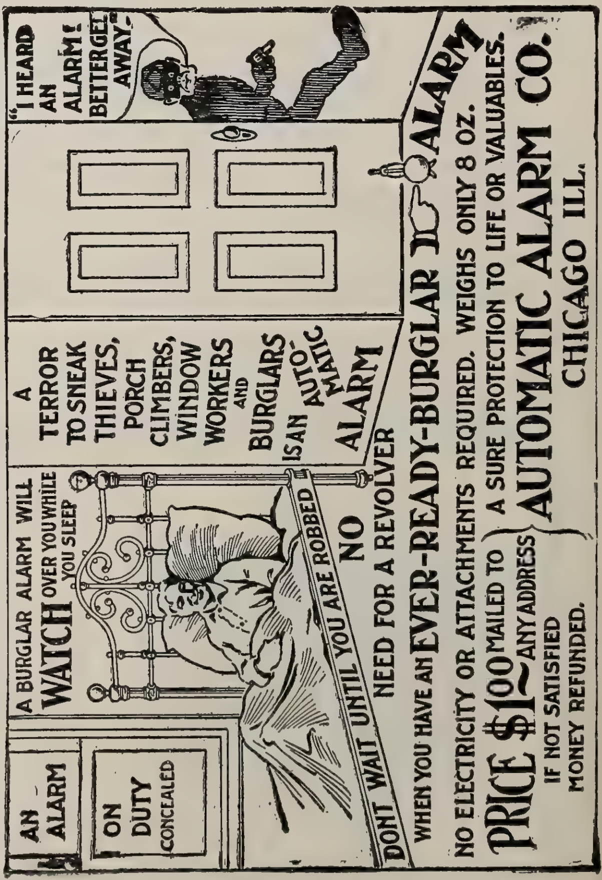
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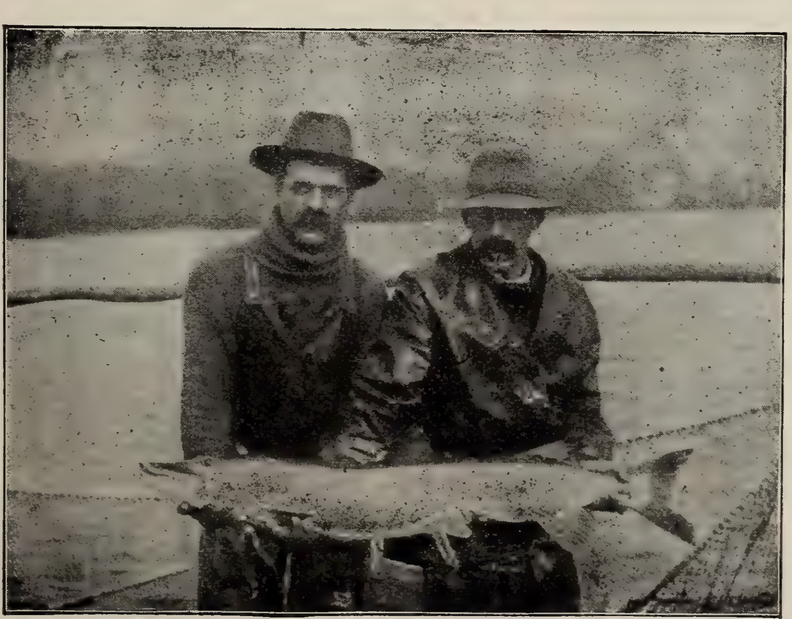

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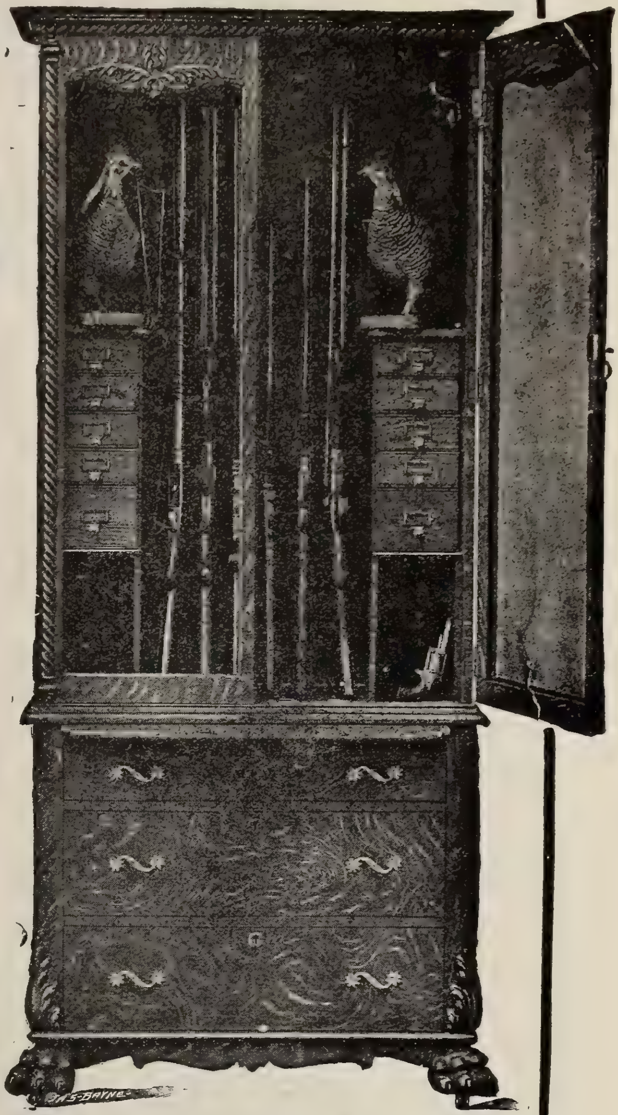

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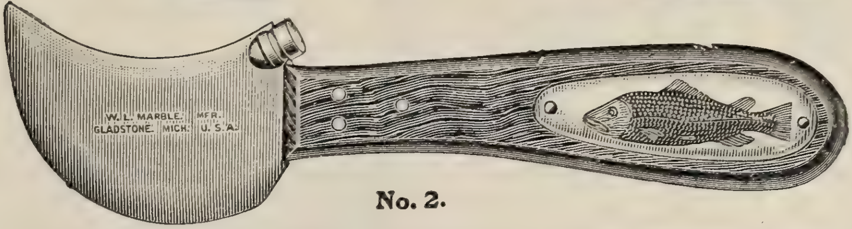

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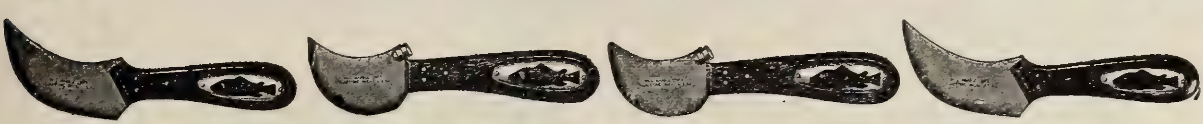

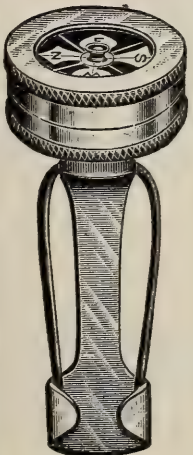

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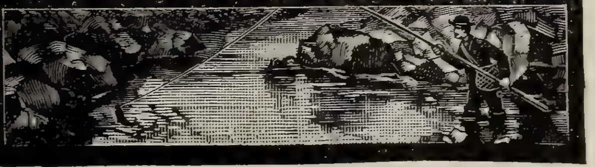

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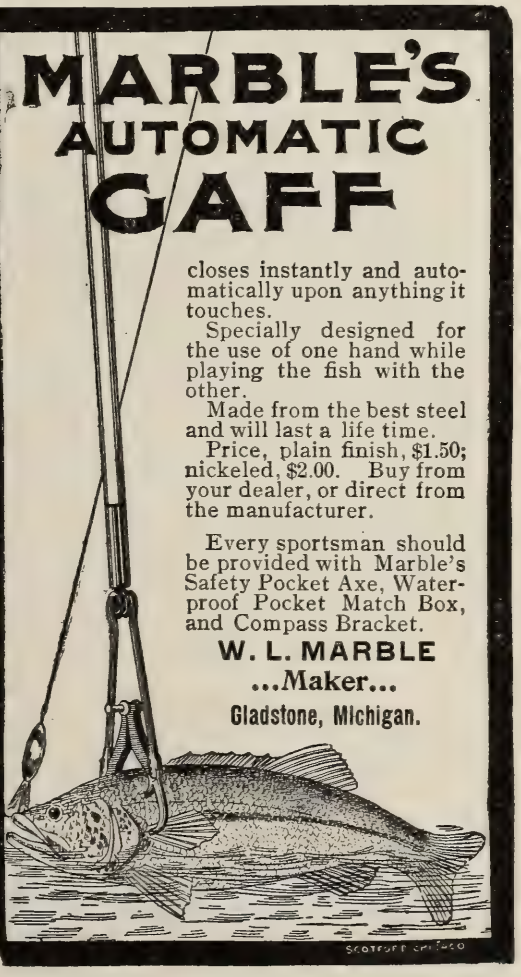

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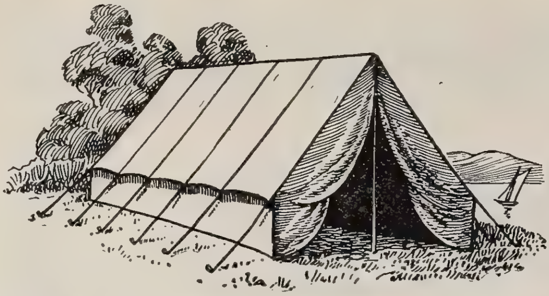

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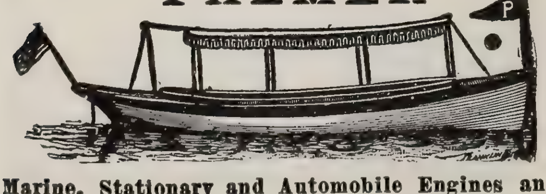

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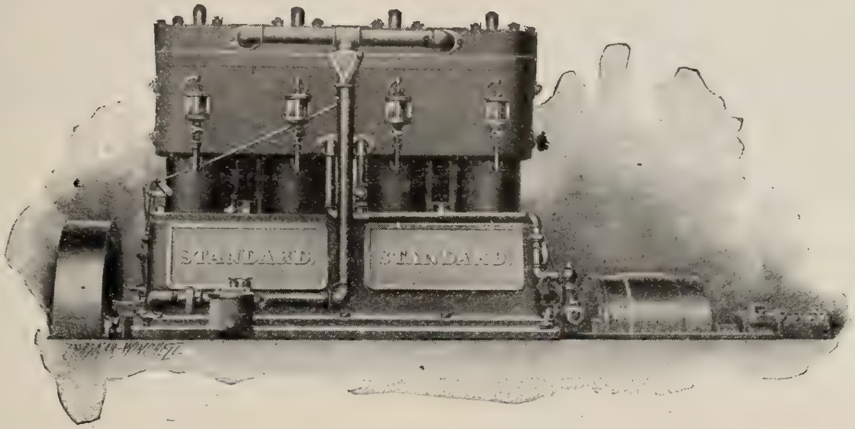

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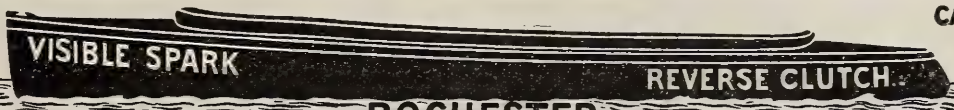

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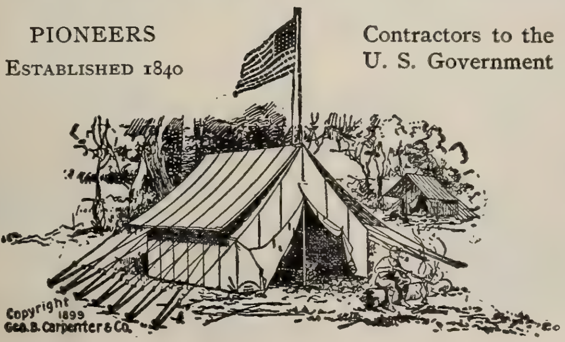
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PROBATE COURT, INGHAM COUNTY,
LANSING OFFICE
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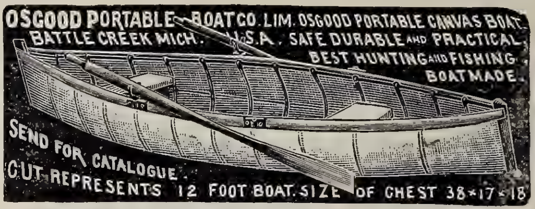
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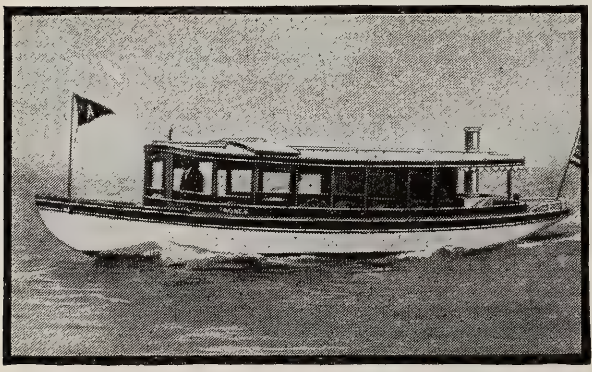

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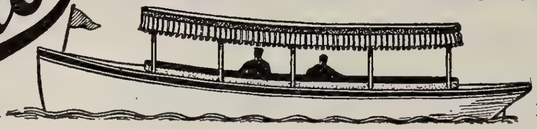

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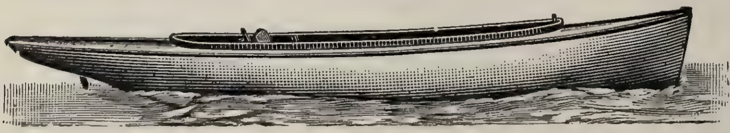

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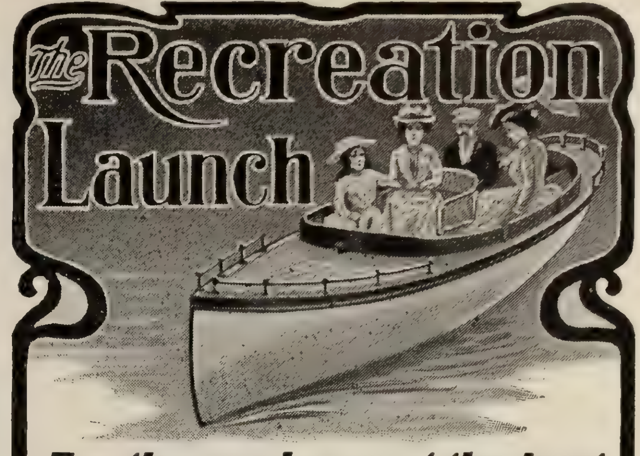

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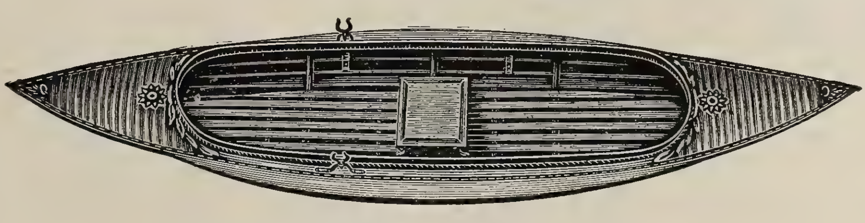

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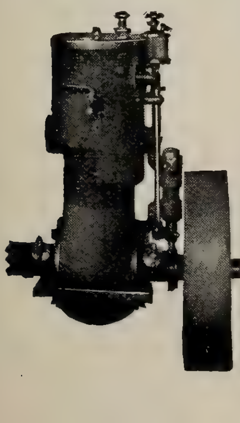

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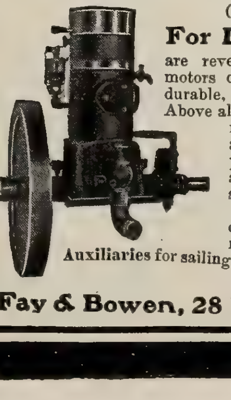

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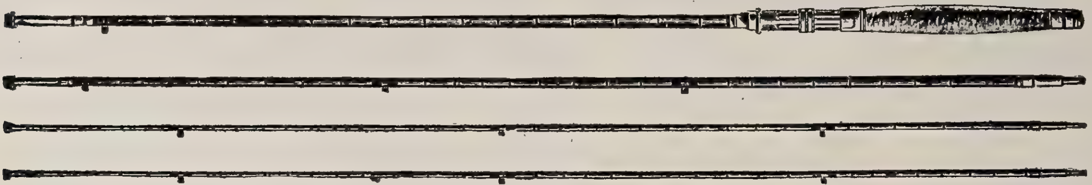

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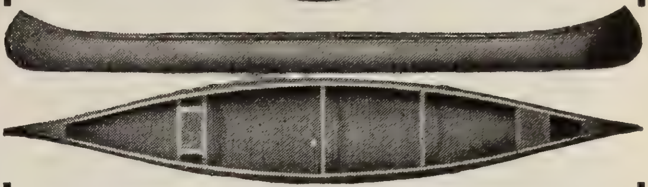

Length, 15 ft.; beam, 32 ins.; depth at centre, 12 ins. Oak, cedar and cherry frame, canvas covered; weight, 65 to 70 lbs. Grade A, $40. Grade B, $32.

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Lengths, 15, 16 and 17 ft.
Grade A, $38, $39, $40. Grade B, $30, $31, $32.

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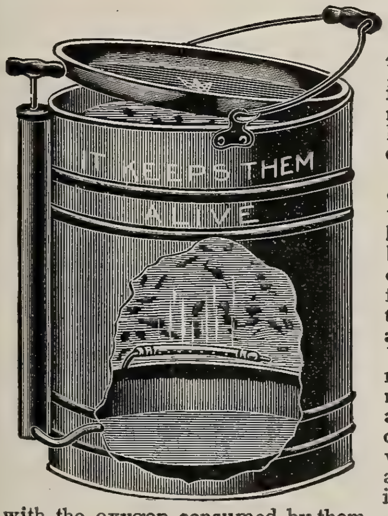

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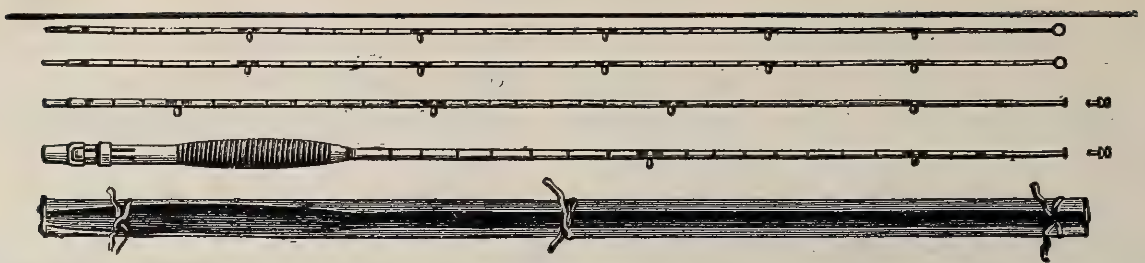

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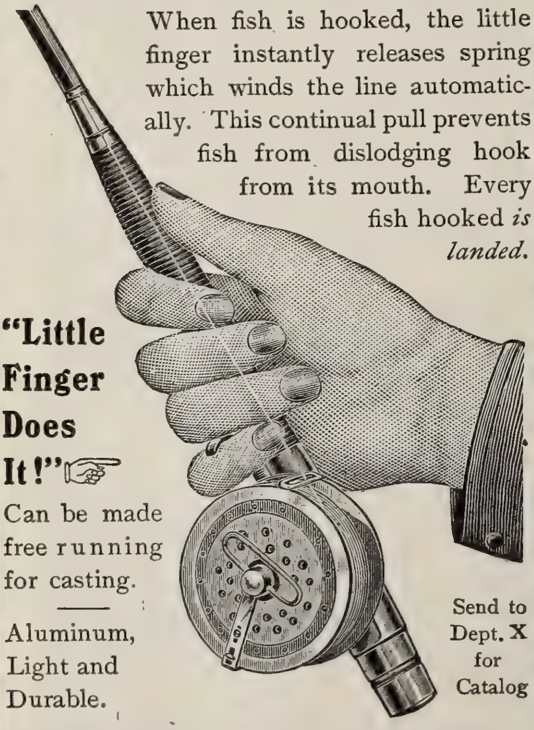

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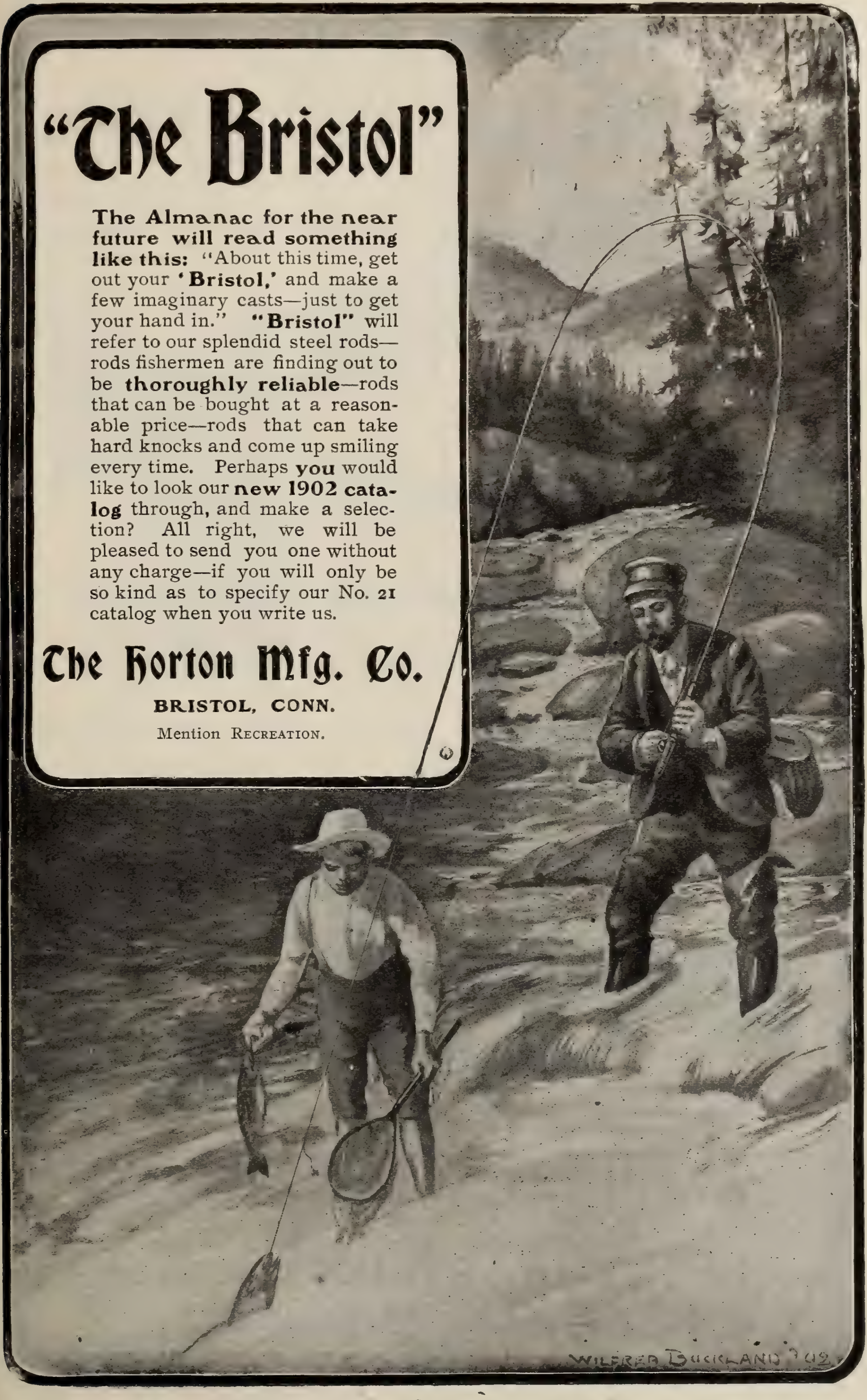

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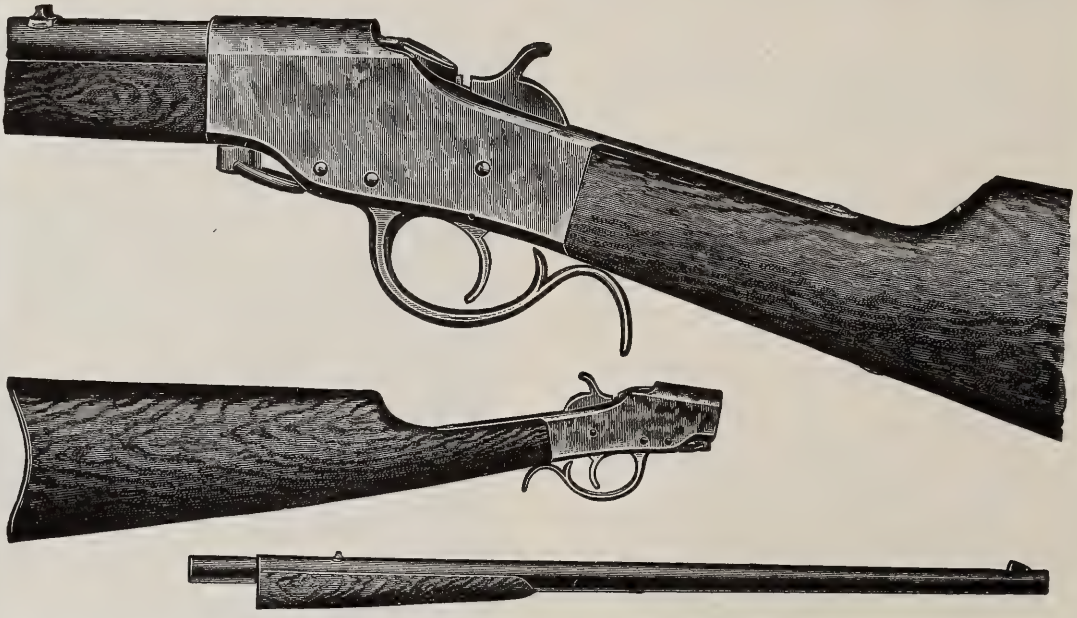

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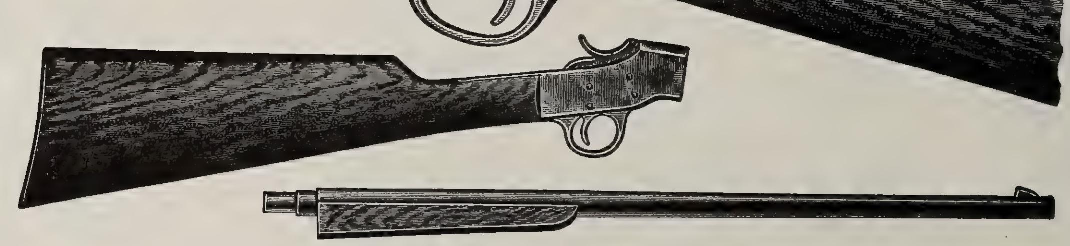

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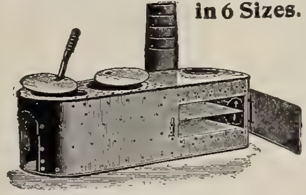

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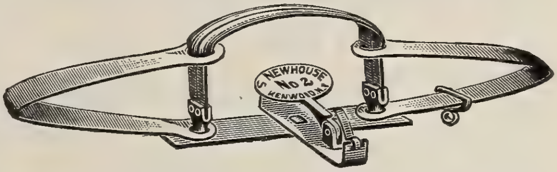

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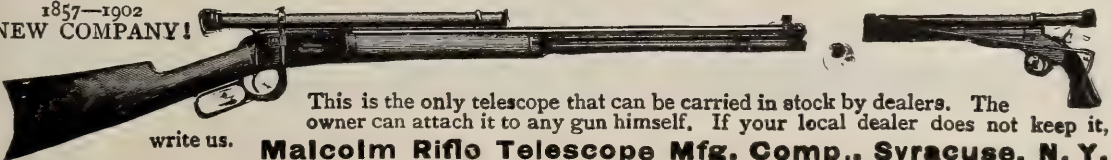

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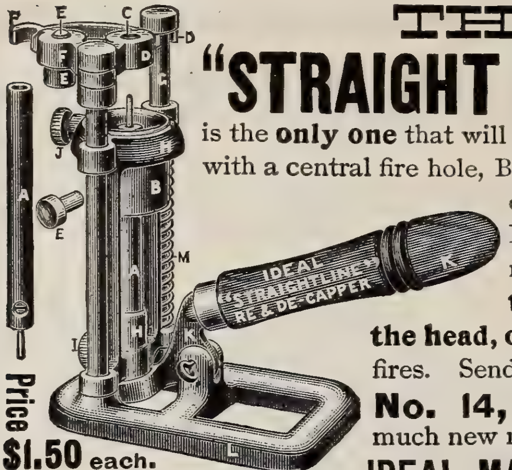
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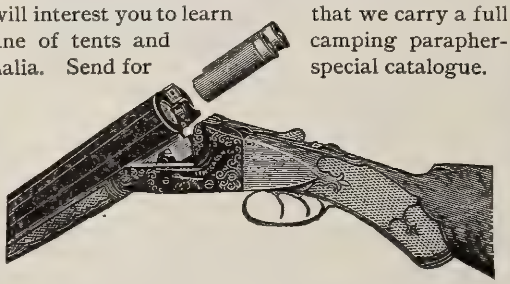

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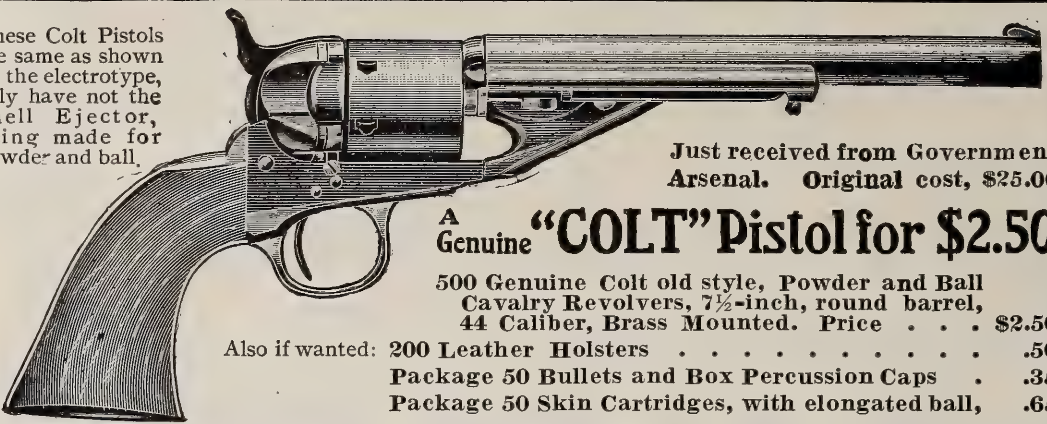

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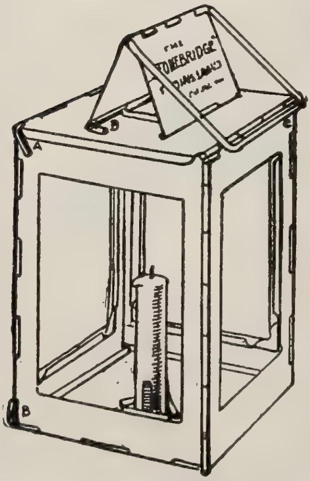

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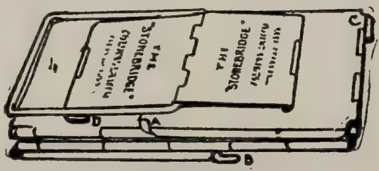

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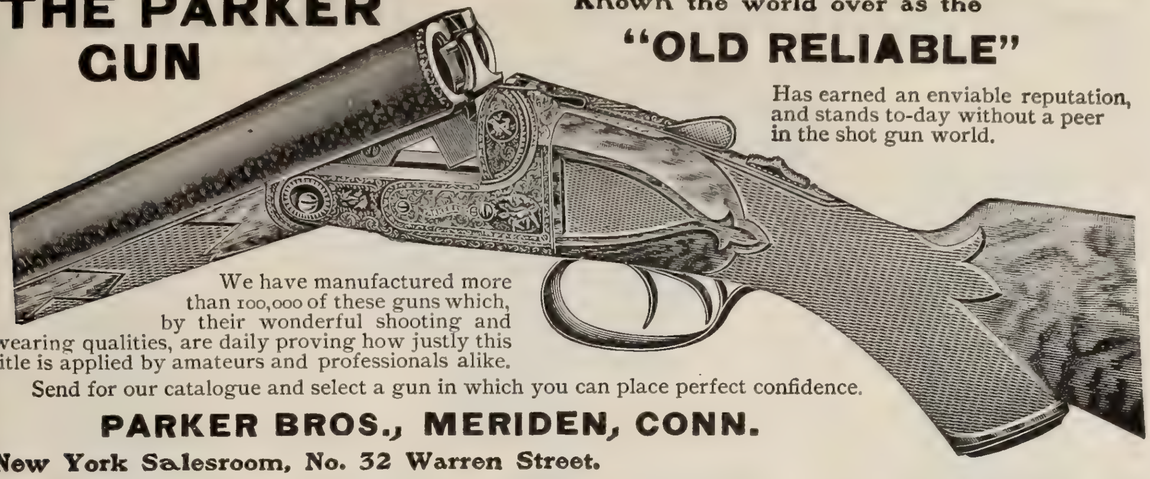

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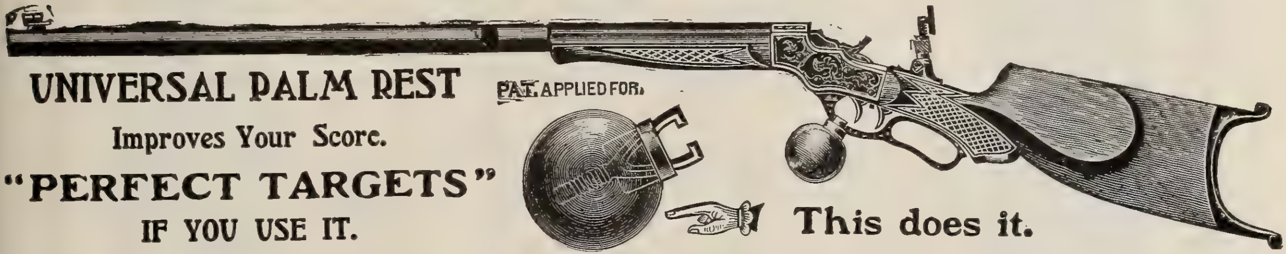

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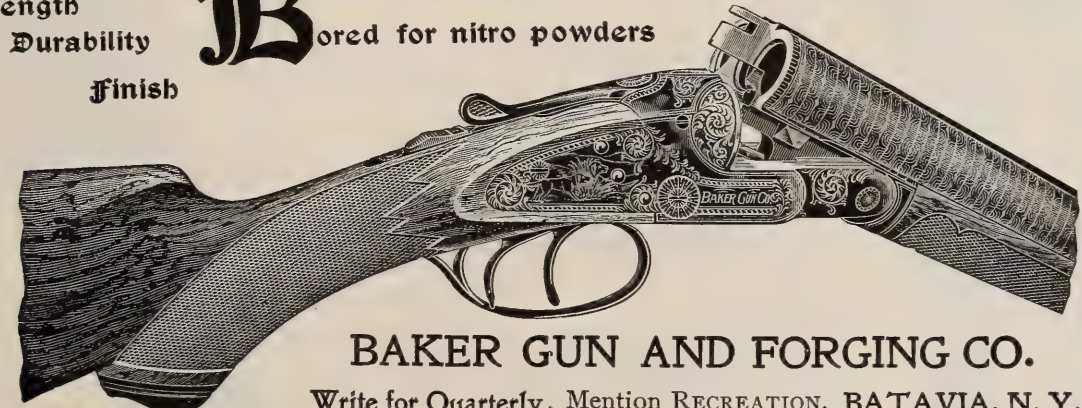

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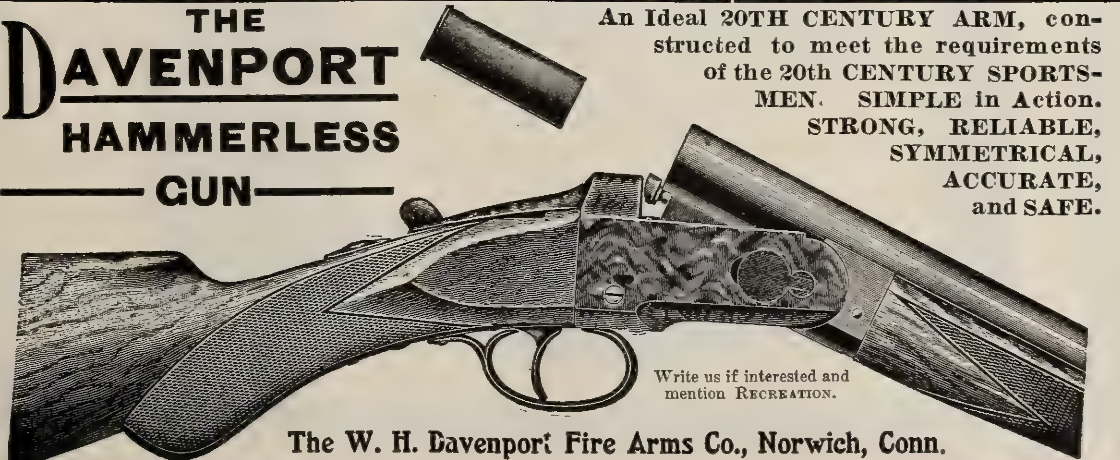

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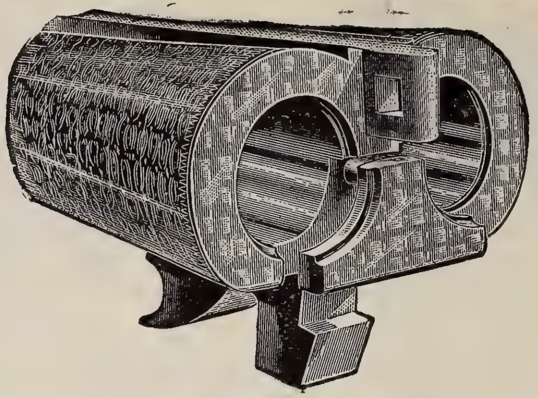

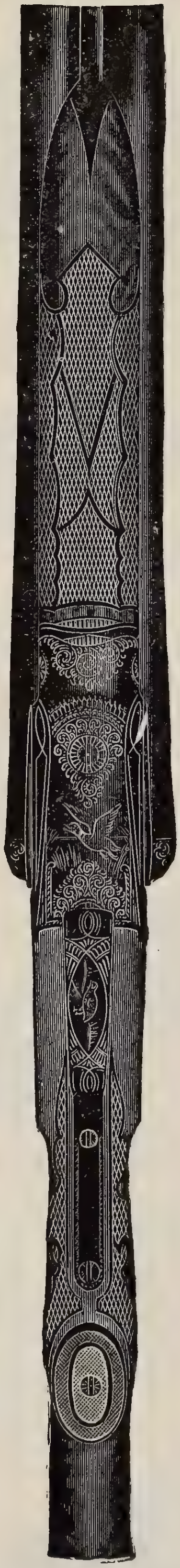

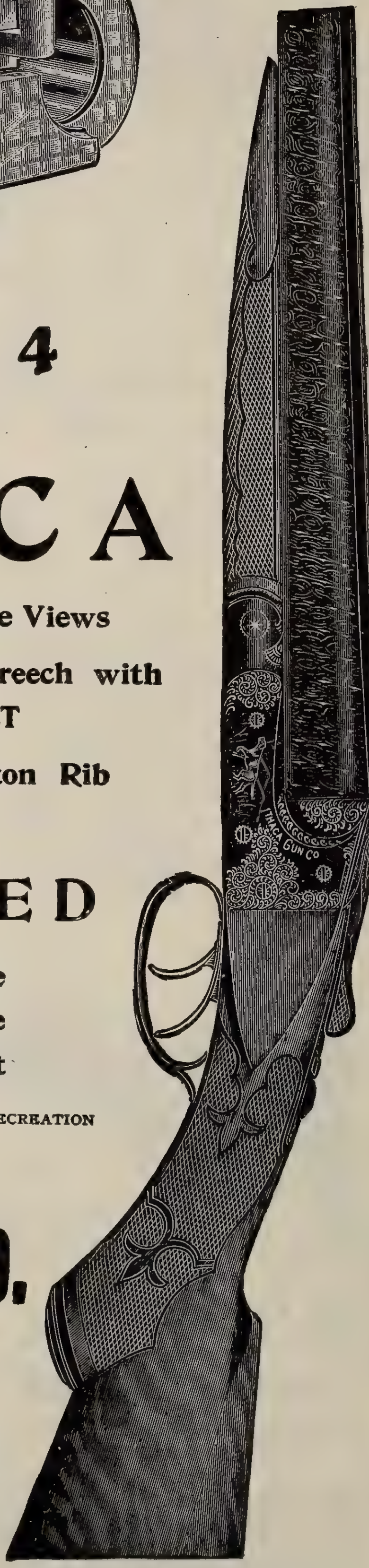

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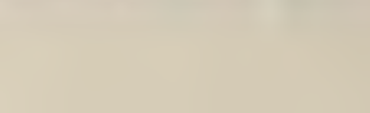

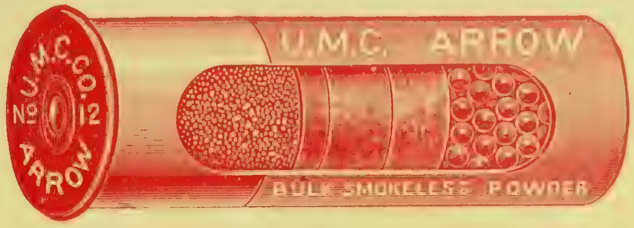

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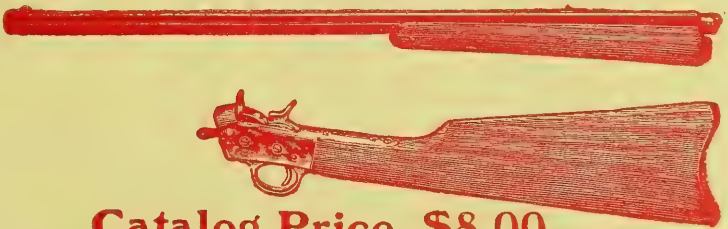

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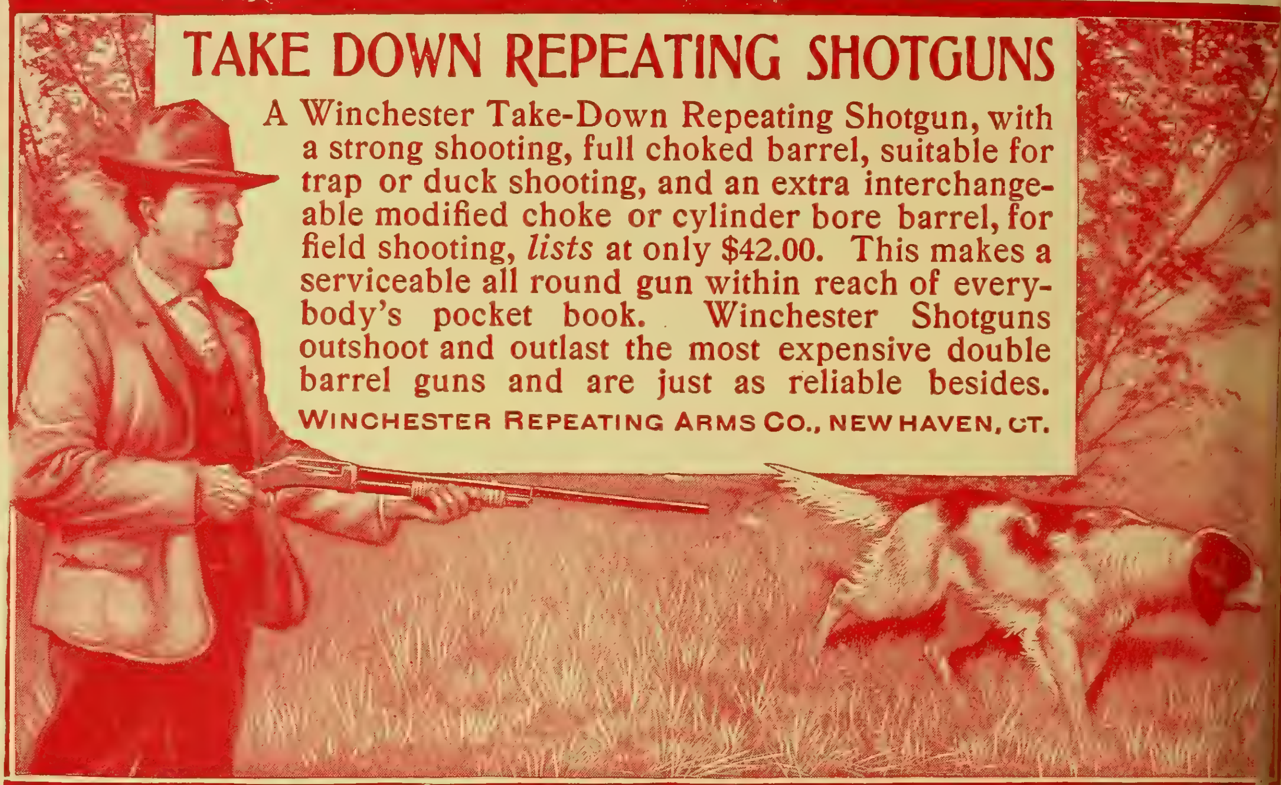

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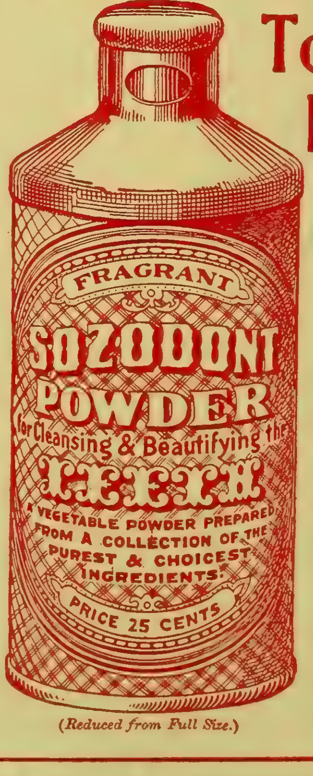
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A VEGETABLE POWDER PREPARED FROM A COLLECTION OF THE PUREST & CHOICEST INGREDIENTS.
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VOLUME XVI.
NUMBER 5

MAY, 1902

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AMATEUR PHOTO BY MRS. NELLIE SCOTT.

OLD BOB.

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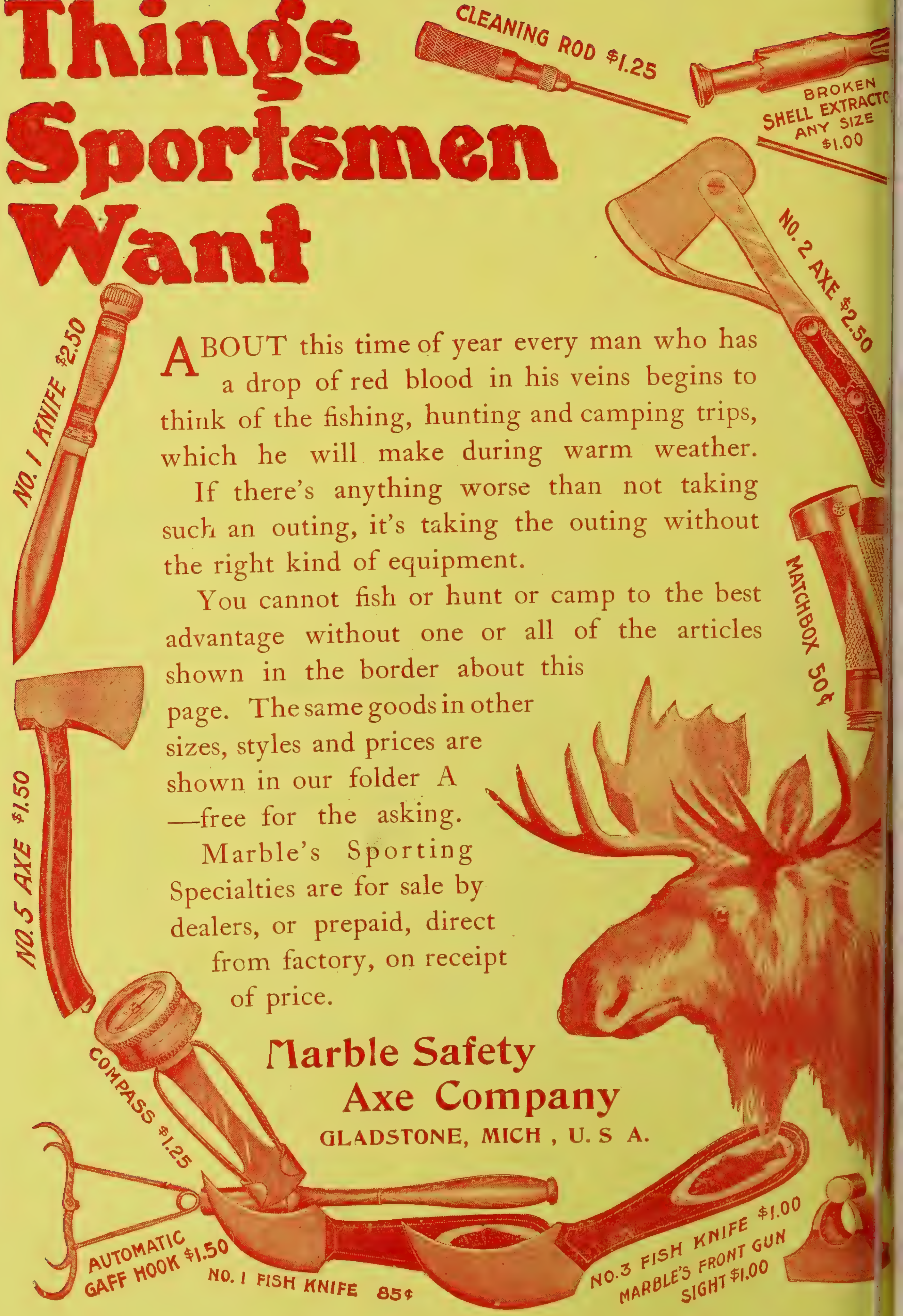
PUBLISHED BY G. O. SHIELDS (COQUINA)
23 WEST 24TH ST., NEW YORK

OFFICIAL ORGAN OF THE LEAGUE OF AMERICAN SPORTSMEN

SPECIAL LYNX NUMBER

Things Sportsmen Want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GLADSTONE, MICH , U. S A.

RECREATION

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G. O. SHIELDS (COQUINA),
Editor and Manager.

23 WEST 24TH STREET,
NEW YORK

CONTENTS OF THIS NUMBER

I Ran Backward a Few Feet, Tripped, and Fell With the Lynx on Top..........FRONTISPIECE

PAGE
A Mix-up With a Lynx. Illustrated..........T. A. RYER 331
A Lynx Hunt in Florida..........Dr. W. A. REEVE 333
The Bob Cat's Banquet. Illustrated..........W. L. UNDERWOOD 335
The Canada Lynx..........A. T. BICKFORD 337
Does the Lynx Destroy Deer?..........L. D. GILMORE 338
A Day on the Delaware. Illustrated..........ZANE GREY 339
A Bear and a Pistol. Illustrated..........A. M. POWELL 341
An Idle Fancy. Poem..........CANDICE BRAMBLE 343
Woodchucks. Illustrated..........ERNEST C. ADAMS 345
A Racket in the Rockies..........A. L. VERMILYA 347
Down the Moon River Illustrated..........L. S. WILSON 349
In Hell Creek Badlands. Illustrated..........WILLIAM T. HORNADAY 353
The Siminol Pirates..........CHAS. B. WEMPLE 357
The Grunt of the Game Hog. Poem. Illustrated..........WILLIAM J. LAMPTON 358
Hunting from the Goff Camps..........WARFIELD RYLEY 361
A Minnesota Muskalonge..........O. L. THOMAS 362
He Stacked the Cards on Them..........Dr. W. A. MANN 364
From the Game Fields.......... 365
Fish and Fishing.......... 373
Guns and Ammunition.......... 377
Natural History.......... 383
The League of American Sportsmen.......... 387
Forestry.......... 392
Pure and Impure Foods.......... 395
Publisher's Notes.......... 398
Editor's Corner.......... 400
Amateur Photography.......... 403

Entered as Second-Class Matter at New York Post-Office, Oct. 17, 1894.

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RESULT OF A SINGLE SHOT FROM A .303 SAVAGE EXPANDING BULLET.

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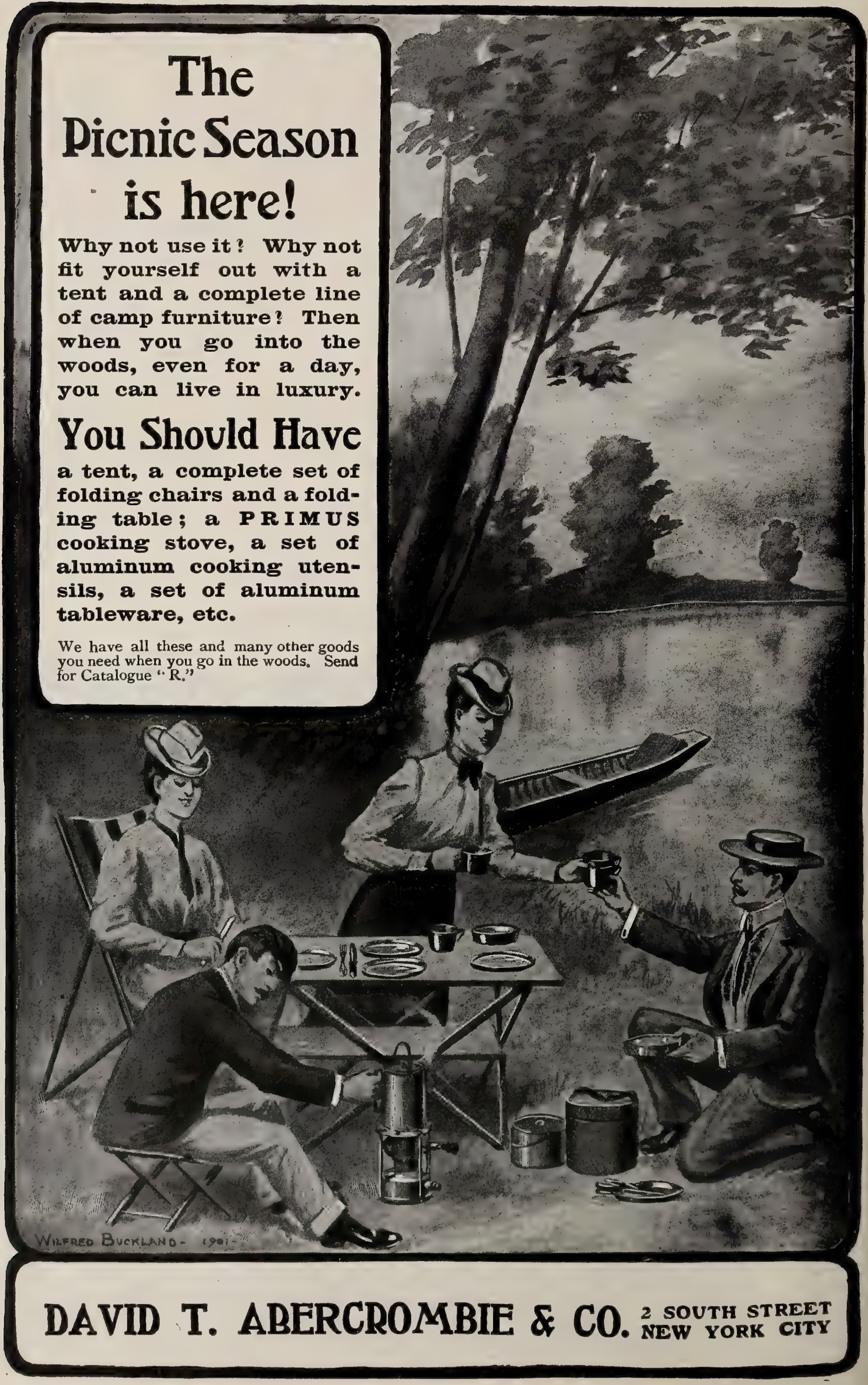

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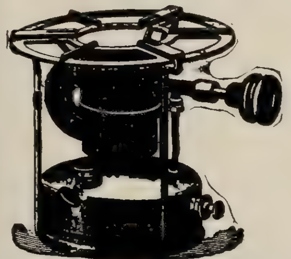

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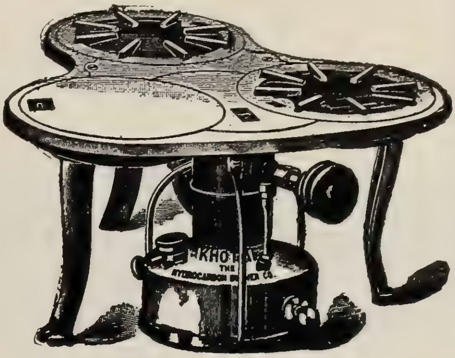

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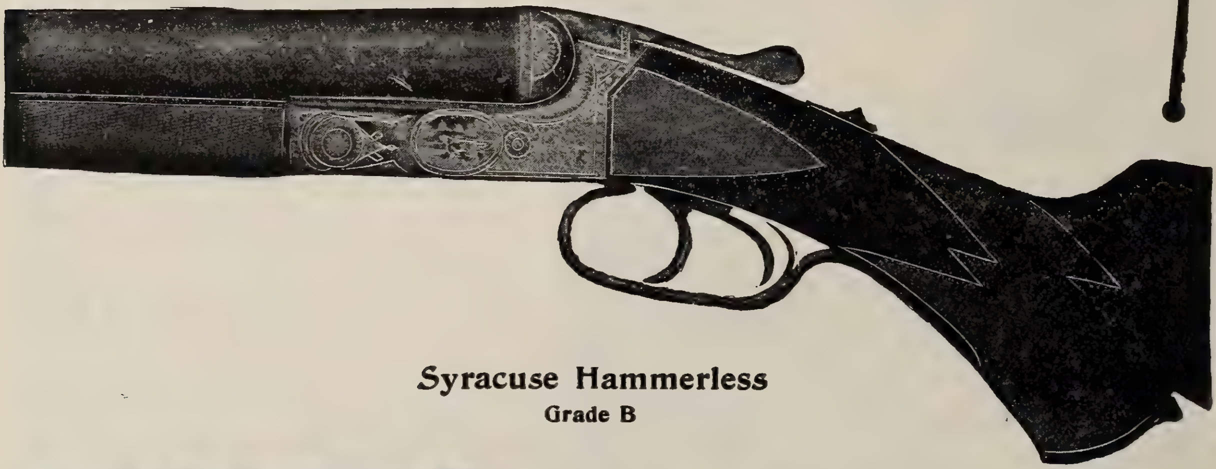

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Grade B

We furnish all styles of our high grade guns fitted with our patented automatic ejector. The cut shows our "B" grade gun made with the finest Damascus barrels, the engraving is of a very high order, the stock selected English Walnut, with full pistol grip, nicely checkered. Write to us direct for catalogue and prices, or any additional information.

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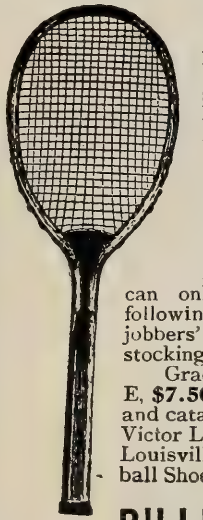

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Grade A, **$2.50**; B, **$2.75**; C, **$3.75**; D, **$5.50**; E, **$7.50.** Special discount to clubs. Send for samples and catalogue. Following a few quotations in supplies: Victor League Ball, **$1.00**; Louisville Slugger Bat, **50c.**; Louisville Taped Wound handle, **60c.**; Black Calf Baseball Shoes, **$2.25**; full line Victor Gloves and Mits.

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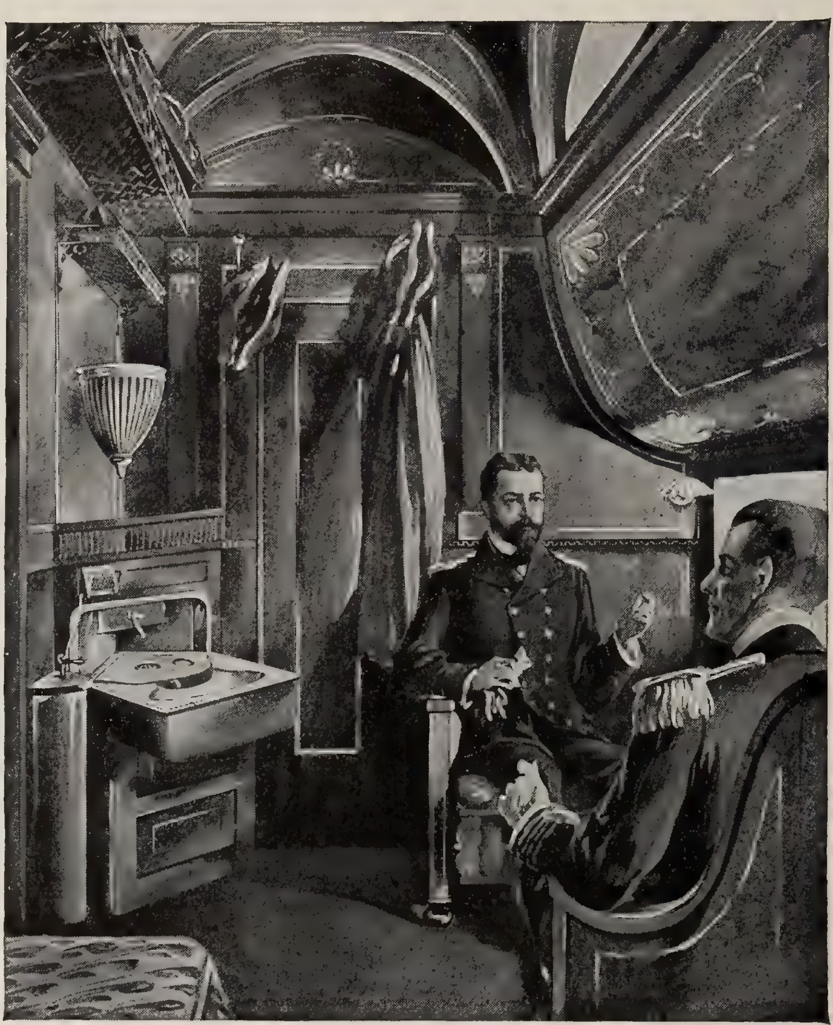

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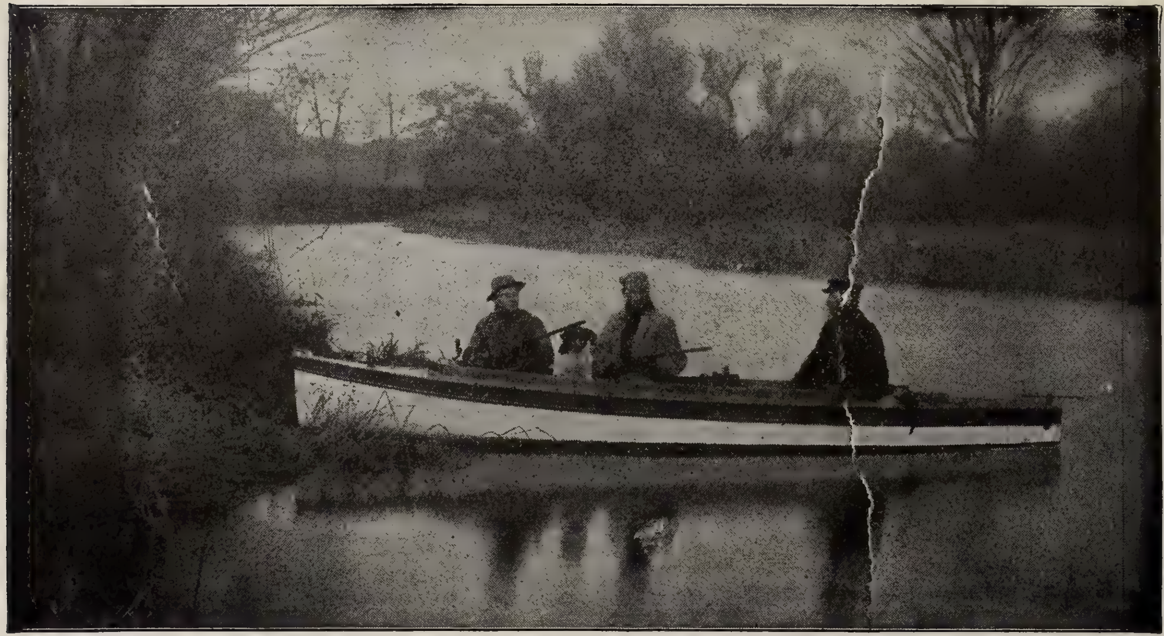

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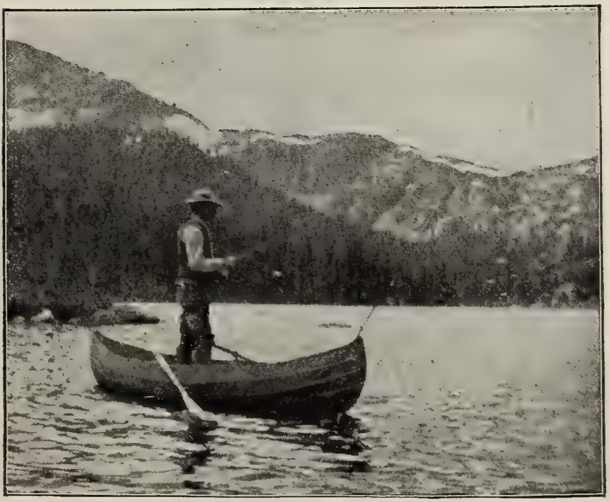

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111 Chambers St., N. Y.

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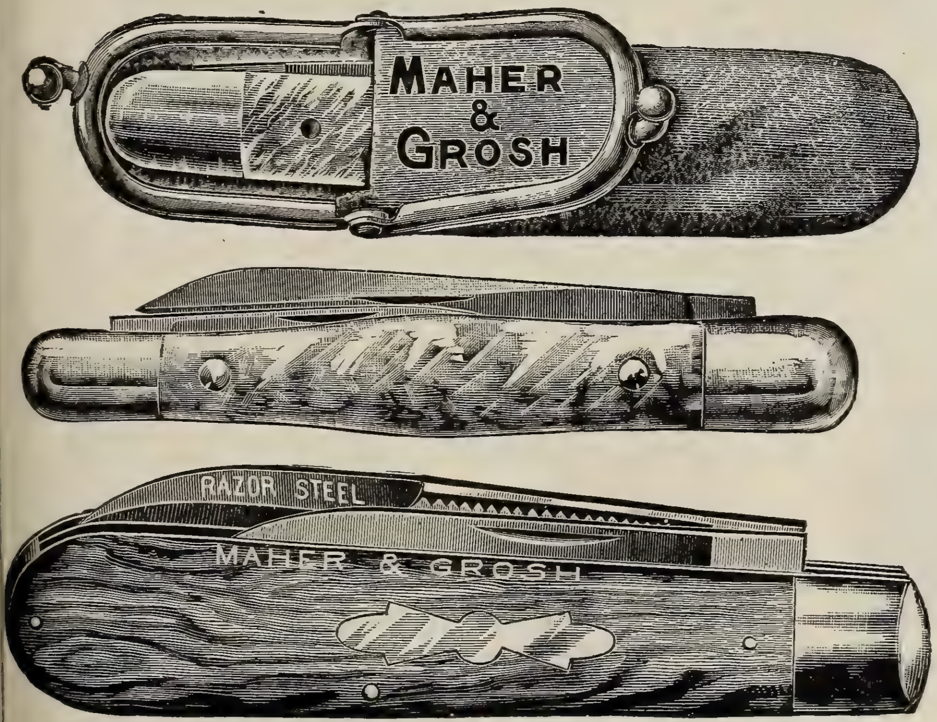
Every M. & G. blade is **hand-forged** from **razor steel,** file tested and warranted.



For a gentleman's vest pocket knife we particularly recommend the knife shown in the upper cut, **"Chauncey Depew's Pet,"** in chamois case, has three blades (one is a file), German silver back and ends, choicest pearl; highest finish; price, $1.50, postpaid. Same knife with ivory handle, $1.25 Pearl handle, 2 blade, $1.00; smaller size, for lady, 75 cents and $1.00; or in ivory, for lady 50 cents.

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STYLE 29
Concert Grand Upright
No other piano made equals this in style and design of case.

The usual way to buy a piano is from a retail agent or dealer. We do not sell our pianos in this way, but supply our pianos direct from our factory to retail purchasers. There are a great many advantages in buying direct from the factory. The most important is the saving in price. We do not employ a single salesman or agent, and we have no salesroom except our factory. We transact all of our business and ship all pianos direct from our factory and our expenses are small, and as we sell a much larger number of pianos than any dealer or retail firm, a very small profit pays us.

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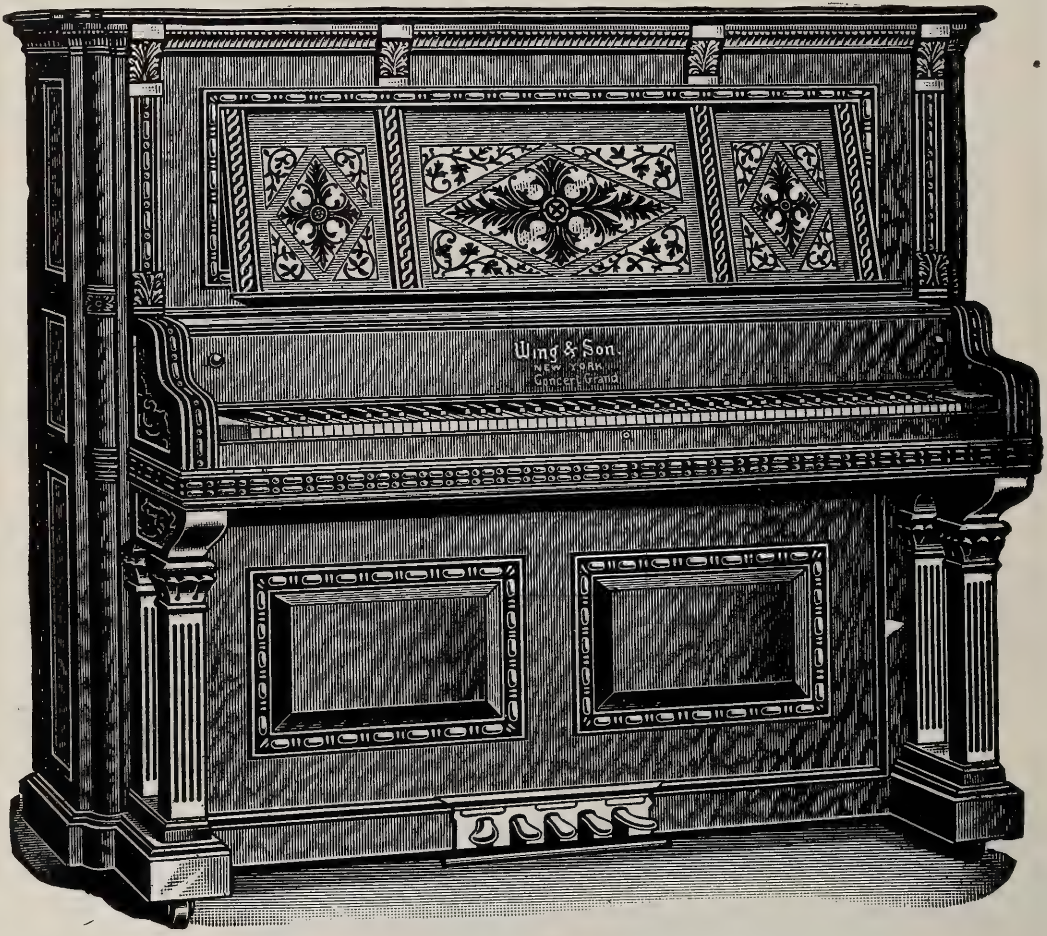
We sell the Wing Piano on easy terms of payments and take old instruments in exchange.



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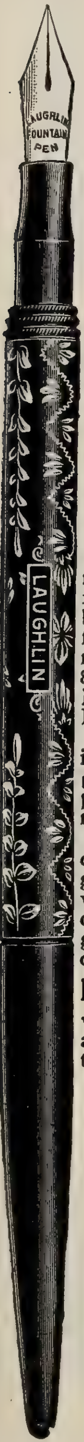

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LAUGHLIN FOUNTAIN PEN

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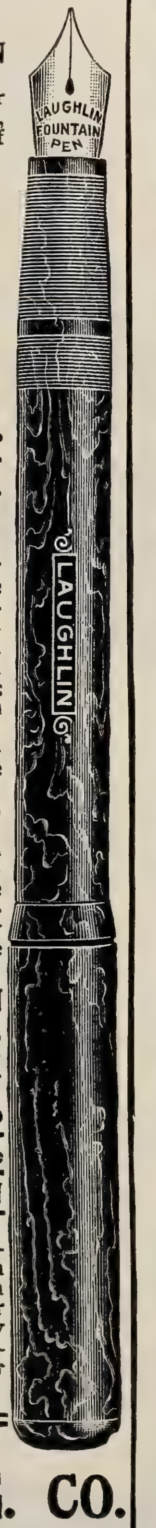
State whether ladies' or gentlemen's style is desired. Illustration on left is full size of ladies' style; on right, gentlemen's style. (Either style, richly trimmed with heavy solid gold mountings for $1.00 additional.) Agents wanted. Write for catalogue.



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These are the seven points that make a beer healthful.

A beer that has them is both good and good for you.

It is a tonic and a food.

It is the beverage of health.

Omit the beer without them.

And remember that Schlitz beer costs just the same as common beer.

You'll get it if you ask for it.

But if you don't care, your dealer may give you a beer that costs less than half so much to brew.

Ask for the brewery bottling.

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THE BEER THAT MADE MILWAUKEE FAMOUS.

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We use the best barley that money can buy.

We get our hops from Bohemia. A partner in our business selects all materials.

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Our yeast is forever the same and it gives to Schlitz the flavor no other beer can have.

3

Cleanliness in our brewery is carried to utmost extremes.

4

We cool Schlitz beer in a plate glass room, in filtered air, to keep germs away from it.

5

We age it for months, until it is well fermented. It is the "green beer" that causes biliousness.

6

Every drop of Schlitz is thoroughly filtered.

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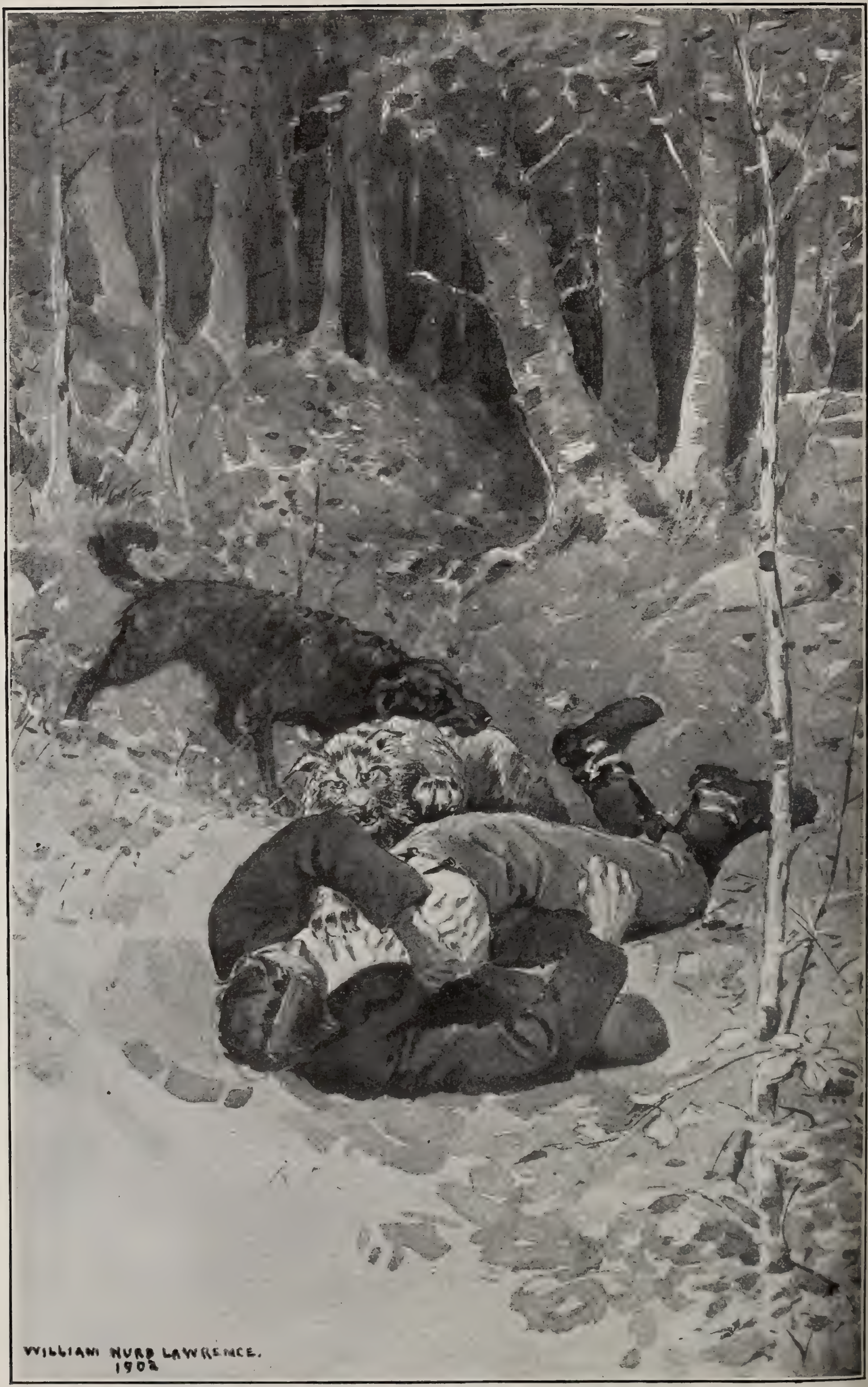
After it is bottled and sealed, every bottle is sterilized.


WILLIAM HURD LAWRENCE.
1902

I RAN BACKWARD A FEW FEET, TRIPPED AND FELL, WITH THE LYNX ON TOP.

RECREATION

Volume XVI. MAY, 1902. Number 5.

G. O. SHIELDS (COQUINA), Editor and Manager

A MIX-UP WITH A LYNX.

T. A. RYER.

More years ago than I like to reckon up, I was a boy and living in Nova Scotia. My father was called at that time the best moose hunter in the Province; so my brother and I were born woodsmen, and we tagged along at our best pace in the old man's footsteps. Game was abundant, though that is a meaningless phrase. No one now can realize what a Nova Scotian hunter of 50 years ago meant by an abundance of game.

Of big game there were moose, caribou, bear and deer. Our fur-bearing animals were beaver, otter, mink, marten, fox and wildcat. Rabbits and grouse swarmed on the land and ducks and geese on the water.

My brother was a great trapper, and especially skilled in catching wildcats. Though I was too young to be of much help, I always went with him on his rounds. We had a Newfoundland dog that was sudden death to any cat trapped by the fore feet. A cat caught by a hind foot could generally stand off the dog until we took a hand in the game.

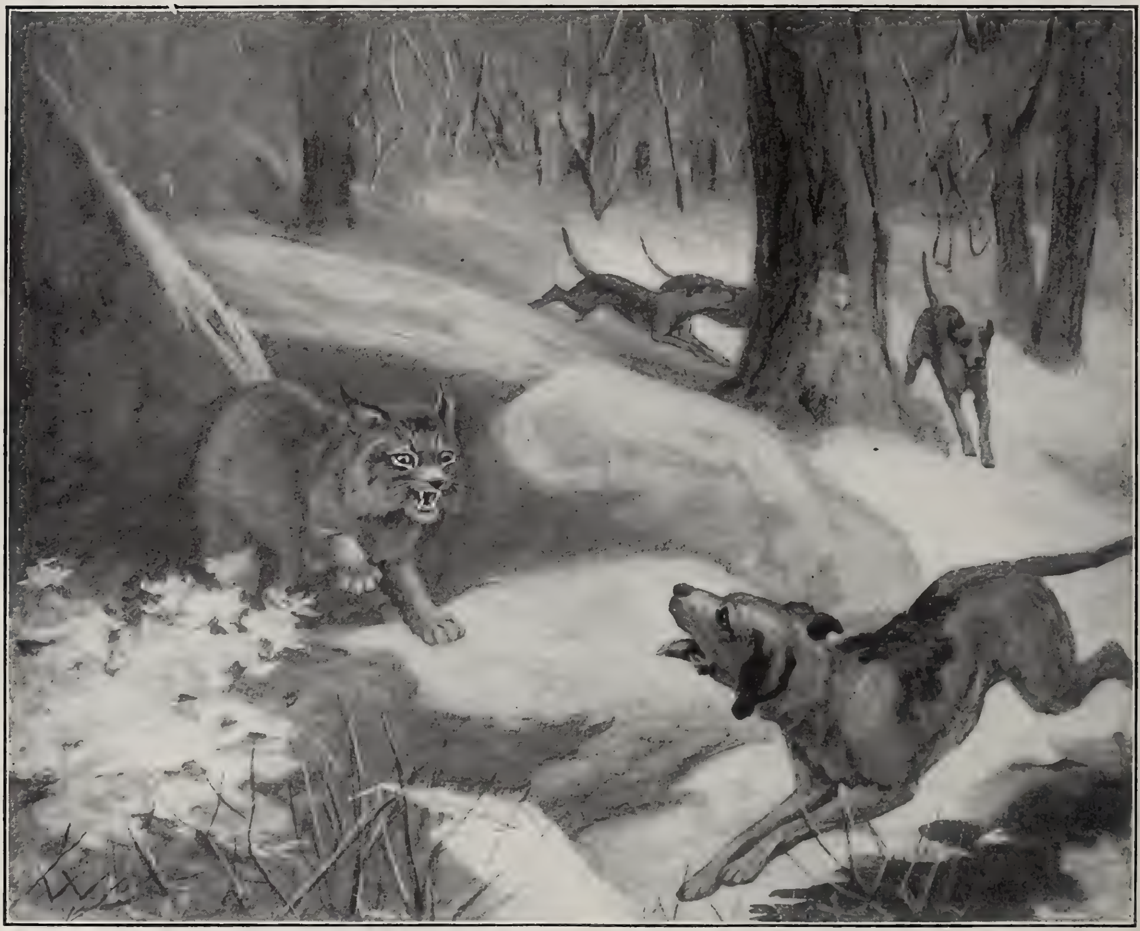
As I have said, my brother was always lucky. He killed the largest moose ever seen in the Province. It weighed over 1,400 pounds, and its horns spread 6 feet from point to point. We would often gather in 6 or 7 cats in a day, and all within 3 miles of our house. You may believe I had more fun in those days than I have ever had since. Our guns were only smooth bore muzzle loaders, but we got lots of game with them.

Our dog did a lot of hunting on his own hook. When he found a fresh track he would follow and generally tree a cat. Then he would stand under the tree and bark until my brother or I came. I well remember a mix-up that dog and I had with a lynx, the first I ever saw; and it came near being the last.

Early one morning my father heard the dog barking on a ridge, a half mile or so from the house. I was called out of bed and sent to see what the dog had. I took my old single barreled smooth bore and trudged along. About 30 feet up in a tree over the dog was what I thought was a large wildcat. I fired; down it came, and the dog was on it in an instant. Gosh! you should have seen the hair fly! The poor dog had no more chance with that lynx than I would have had with Samson. The great cat had him on his back in a flash, and was raking his belly with its hind claws.

I saw the dog would be killed in a minute more. I had no time to load the gun, but picked up the first thing I saw, which happened to be a dead limb that lay handily, and sailed in. The limb was rotten, and flew into bits at the first blow. All I accomplished was to turn the lynx's attention to myself. It let go the dog and, with a spitting yowl, sprang at me. I ran backward a few feet, tripped, and fell, with the lynx on top, raking me fore and aft.

But the old dog was good stuff. He worried the brute so savagely that it had to turn and fight him off. I got to my feet, grabbed my gun, clubbed the lynx and ended the row with one good blow. It broke the stock, bent the barrel and wrecked the gun generally; but it killed the lynx, and I was satisfied. Father bought me a double barrel soon after; but the old dog never treed another cat.



AN INCIDENT OF LYNX HUNTING IN THE ROCKIES.

Her Friend: But you have encouraged half a dozen men to propose and then refused them.

The Coquette: Well, you know, I've taught them to beware of over-confidence.
—Puck.

A LYNX HUNT IN FLORIDA.

W. A. REEVE.

It was all arranged the night before. George had asked if we would like a lynx hunt. George is one of the most faithful and honest guides in Florida. He lives on the shore of Lake Apopka. Numerous cats also live there. None of us had ever killed a lynx, and, of course, we wanted to add one to our list. There is war between George and these animals.

At 5:30 a. m. we sat down to such a breakfast as Mrs. Stokes alone can prepare. We flagged the train in front of the house, receiving the usually hearty welcome from Conductor Abberger. To travel on his train is to get your hunting proclivities aroused to the utmost. He is a keen hunter, and the stories of his personal experiences will take you to your destination all too soon. George met us at the little station in front of his home. With him were his nephew Henry and 2 dogs, Red and Gyp. A walk of a mile took us to our stands. Mine was by a picket fence at the edge of a piece of woods and a thick swamp. The captain, a retired naval officer, was as keen a sportsman as ever pulled a trigger. He could not only kill game, but knew how to cook it properly. He was placed several rods farther in the woods. Grandpa, a kindly old gentleman from St. Louis, was stationed on a knoll in the rear and farther to the left. He is called Foxy Grandpa from his accurate resemblance to that famous gentleman. George, Henry and the dogs proceeded to a dense hummock about a mile in front of us and began beating the thickets.

For half an hour we heard no sound from the dogs, but Henry began and maintained at intervals of about one minute a long-drawn wail, for the purpose of urging on the dogs and starting the game. His booow! hooow! hooow! in a piercing and high pitched voice could be heard a mile away. Then the deep, long-drawn voice of Red broke the monotony and hastened the blood through our veins. The sharper, quicker yelps of Gyp joined the chorus, and the chase was on. Nearer and nearer, louder and louder, came the baying; then a lull. An anxious wait, and then away off to the left the dogs took it up. The cat had scented danger, and, making a circle, had gone by, followed by Red. Gyp soon began, having indirectly started another. George was heard directly in my front, urging him on; but he came no nearer. The lynx was evidently circling. I scarcely dared breathe, so quiet did I try to keep. The tension was soon relaxed, for the cunning animal had doubled on George and started for the big swamp in front and safety. Henry's voice had long since become inaudible, having followed Red out of hearing.

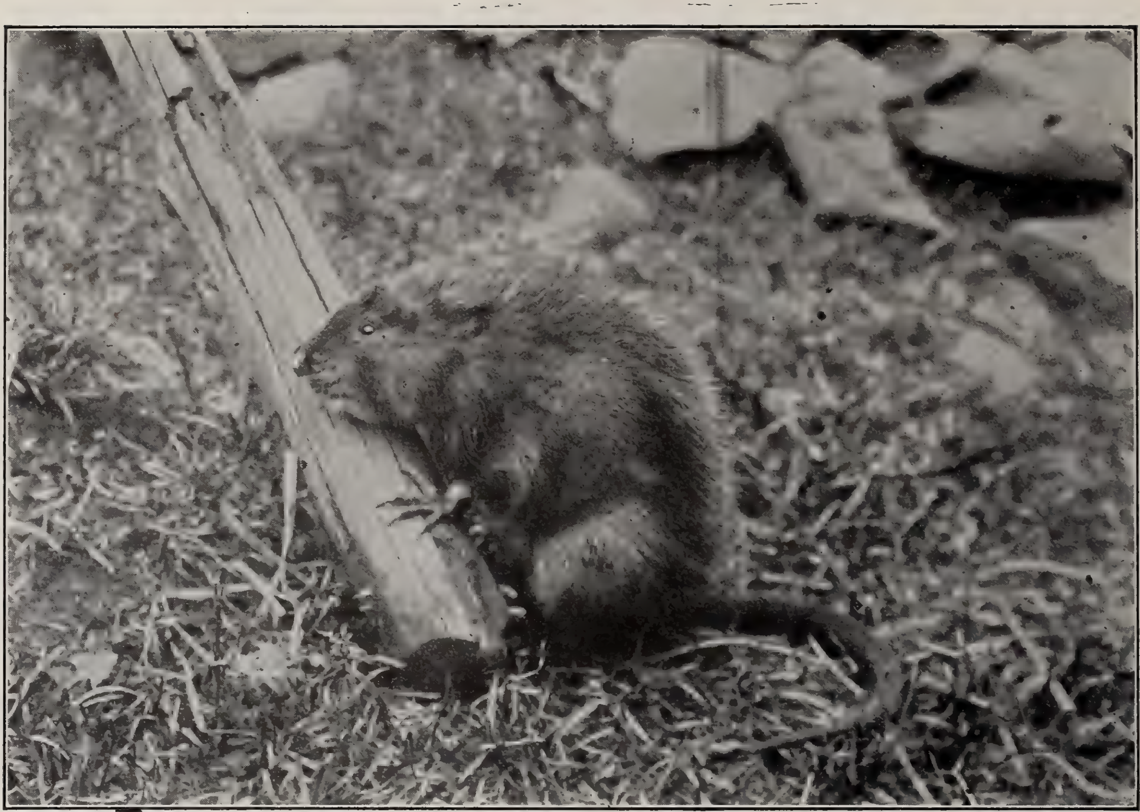
With George and Gyp lost to us in the South and Henry and Red in the Northeast, I began to lose interest. It was one of those perfect, warm days so common in Florida, and so beneficial to the grip-racked patient from the North. A gradual drowsiness was coming over me when I was startled by the crack of the Captain's gun, followed almost immediately by 2 shots from Grandpa. At a shout from the Captain I hastened to him. He stood over a magnificent specimen of lynx. The Captain said he too was dozing when he felt impelled to look around. Behind him and across an open glade was sneaking this cat. Instantly the Captain fired; instantly there was in motion a spinning wheel of leaves, twigs and lynx. Before the Captain made up his mind to shoot again the wheel suddenly straightened out, as though a string had broken, and was still.

"What was Grandpa shooting at?" I asked.

"Give it up; let's go to see," he said.

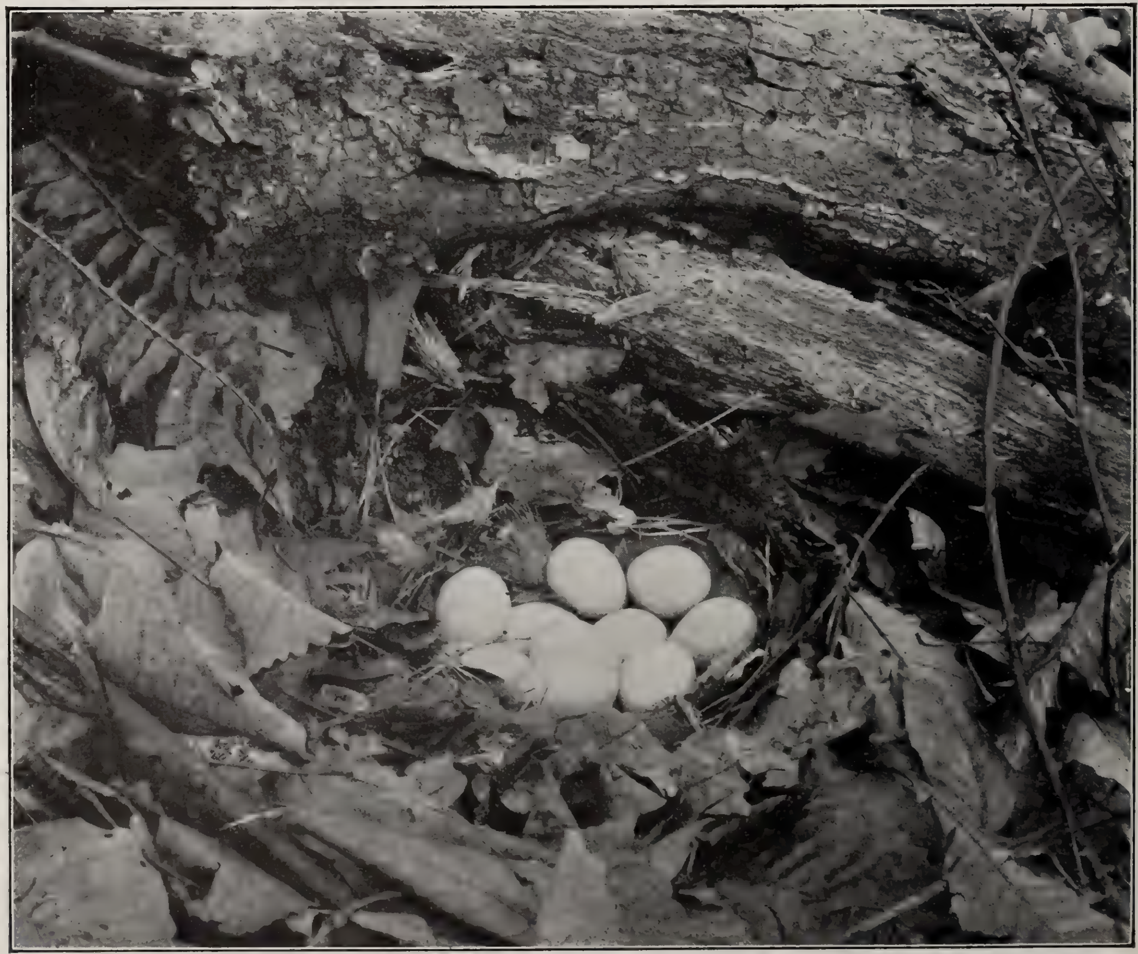
Picking up Mr. Lynx, we started. Grandpa was standing by a young buck, with a bloody knife in his hand, having just cut the buck's throat. The baying of Red was heard coming toward us. In his pursuit of the cat either he or Henry had disturbed the deer, which was trying to sneak away, not seeing Grandpa, who sat with his back to a tree. The deer was making for the big swamp. Grandpa said he had been asleep, when, awakening suddenly, he saw the buck passing about 20 yards away. Grandpa is the soul of truth, but he was surely mistaken when he said he had been asleep, for no deer would have come within a mile of him when asleep. I have slept, or tried to, in the same tent with Grandpa, and I know. Ask the Captain. Grandpa has not done any hunting for 30 years and says he can not shoot as he used to. I would rather be able to shoot as poorly as Grandpa than as well as some others.

Harry met us at noon with the lunch, having driven over from Mohawk to take us back. Harry is Stokes' younger brother, a happy, good natured and obliging assistant to his brother in looking after the comfort of the guests. After lunch we devoted the afternoon, on our way home, to quails. At that I got my share of fun, but Grandpa, as usual, got more than his share of the birds.


AMATEUR PHOTO BY W. STARK.

MUSKRAT.

Winner of 19th prize in RECREATION'S Sixth Annual Photo Competition. Made with Collinear Lens.


AMATEUR PHOTO BY WM. H. FISHER.

NEST OF RUFFED GROUSE.

Winner of 17th Prize in RECREATION'S Sixth Annual Photo Competition. Made with Cycle Poco Camera.

THE BOBCAT'S BANQUET.

W. L. UNDERWOOD.

Photos by the Author.

A great philosopher once said, "The proper study of mankind is man." In modern times we find that the proper study of man, for at least a portion of the time, is wild animals. Thousands of men, women and children are seeking every opportunity to learn more of the wild creatures that inhabit the forests, the fields and the mountains. It is the duty of every parent and every teacher to afford those under his charge the best possible opportunity for pursuing this study.

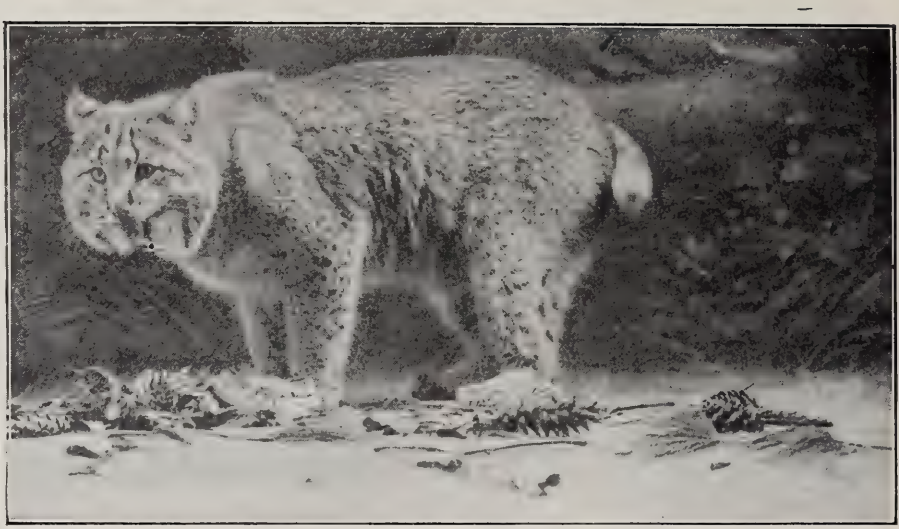
There is no method by which this line of study can more profitably and practically be followed than by domesticating wild animals. There are scarcely any species of quadruped in this country that can not be easily domesticated, if taken in charge when very young. The fur-bearing animals, especially, take readily to the domestic life of human beings. Take, for instance, a young lynx, or wolf, or panther, or otter, and after a few days of handling and kind treatment he becomes as affectionate as a kitten or a puppy. A fawn, of any of the species of deer, or a cub bear may also be trained within a few days or weeks; and while the nature of any wild beast is materially changed by its introduction into a family of human beings, yet its characteristics remain largely the same as in its wild state. These may be observed and studied to any extent desired, while the pet capers about the dooryard, the house, or the barnyard.

No. 1.

Humanitarians have often claimed that the keeping of wild animals in confinement is cruel, but this is not necessarily so. On the other hand I claim that the man who takes one of these wild beasts from the woods while in infancy, gives it a good home, feeds it regularly, and allows it proper liberty, confers on the animal a lasting kindness. I do not believe in caging up live animals and confining them to small areas; but if any such animal can have the freedom of the house, or a yard or a field, according as its nature may require, it will suffer no inconvenience from its change of environment. On the other hand, the man who takes such an animal from its wild state, saves it from suffering many a pang from hunger. He saves it from the

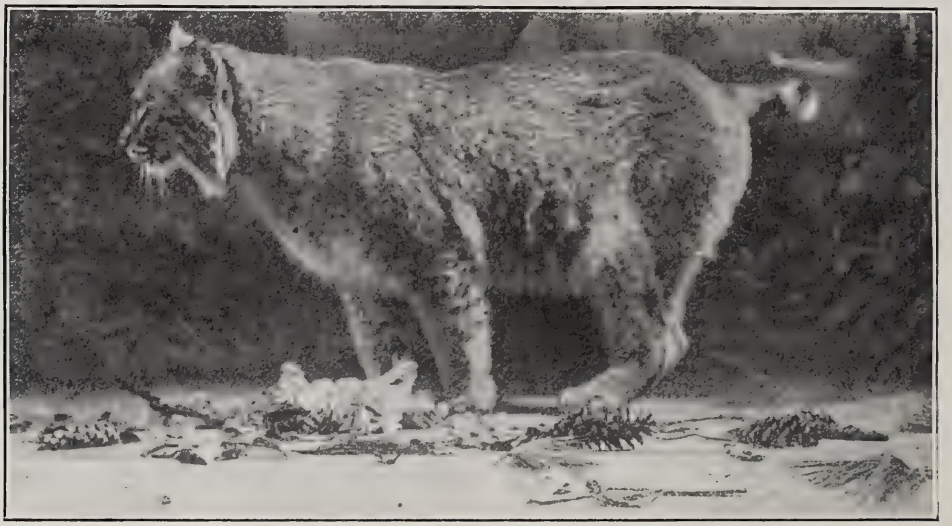
No. 2.

other wild beasts that would prey on it. He saves it from the hunter and the dog. He insures it a warm den in which to sleep, while in its natural habitat it must be subjected to cold and to storms; from which it frequently suffers severely.



No. 3.

I have pursued the study of wild animals and birds for many years, and have never found a greater delight in this in any other way than in getting into close touch with a few specimens domesticated. Among these, I include a lynx, ordinarily known as a wildcat, whose acquaintance I made 2 years ago, when he was on exhibition in a store window. After some preliminaries I induced him to pose before my camera. The sittings were in a room I have arranged expressly for animal photography.



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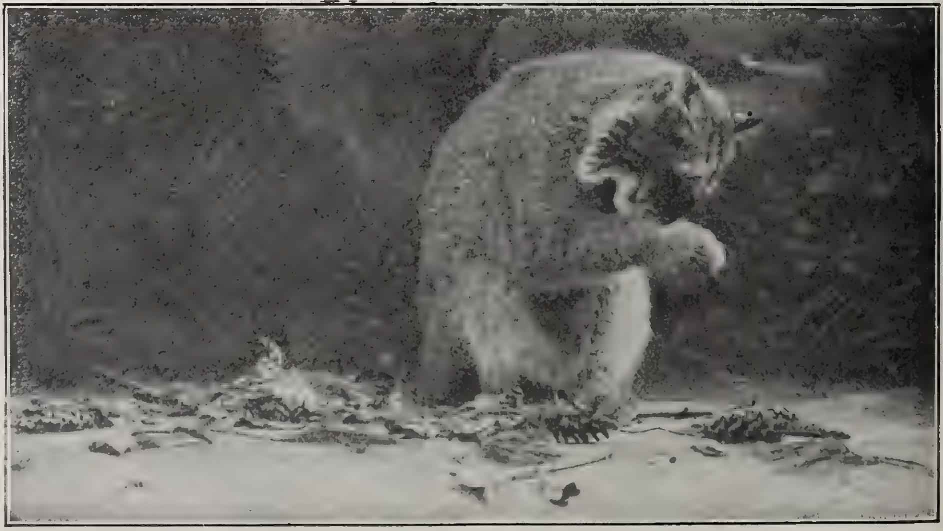


No. 5.

The first picture shows the cat as he received a grouse I had just brought him from market. Before beginning to eat, he mouthed the bird all over and crushed all its bones.

The second picture gives an idea of the wildcat's savage voracity, as he is shown in the act of eating. The third and fourth views depict an interruption and show his sinister expression of resentment at the interference. In the last of the series

Mr. Bob sits washing his face and paws, like an ordinary cat.

These negatives were taken with a 19 inch Goerz lens, with an exposure of 1/25 second, full aperture.

This cat broke the record for weight, tipping the scales at 33¼ pounds. The normal weight of an ordinary wildcat is about 19 pounds, though an occasional one attains 25 pounds. The weight of this one was probably due to lack of exercise, though he did not appear excessively fat.

THE CANADA LYNX.

A. T. BICKFORD.

It must be interesting to a student of nature to observe the numerous provisions made by the Creator to control by natural means the superabundance of any one species of animal over another. Therefore we find one carnivorous animal preying on one of the same species to which he belongs as well as on the more harmless herbivorous creatures.

An instance of the above is the Canada lynx. His special mission seems to be the regulating of the increase of the small bush rabbits, or hares, which in some seasons are so numerous in our woods. Wherever the hare is found there also is the domain of the lynx, who steals upon the timid hare in his seat underneath the fallen log, or among the willows in the thicket. The lynx also catches his prey by pursuing it after a fresh fall of snow. Then the hare, impeded by the loose snow, is easily caught, as the snow is not so much of an impediment to the lynx's longer legs.

It is a peculiar fact that hares, or bush rabbits, increase in recurring periods of years, reaching a climax in about 7 years, when some disease appears among them which reduces them from great numbers to scarcity in a short time. The lynx also increases during these years of plenty. On the decrease of the rabbit he suddenly finds himself pinched for food. At such times, impelled by hunger, according to the evidence of old trappers and hunters, the lynx preys on his own species, the weaker falling victims to the stronger. Thus the lynx becomes in himself the regulator of the numbers of his own species, preserving the balance of Nature by the performance of what seems to us an unnatural act.

The lynx is not, as one would imagine from his looks, a dangerous animal to man. He has a propensity for following a wayfarer through the woods, but it is more from curiosity than from any notion of attacking a human being. Moreover, the lynx is not at all tenacious of life, differing in that respect from most animals of the cat tribe. He is easily dispatched by a blow on the nose or back, offering little resistance when trapped.

A common mode of capturing the lynx, practiced by Indian and half breed trappers, is to suspend a snare of stout cord above a path, rabbit run or snowshoe track in the woods, taking advantage of the lynx's well known proclivity for following a track. The lynx, with great simplicity, works his head into the noose and strains on the cord, which is fastened to a clog. He thus strangles himself, making little effort to escape or chew the cord.

The lynx is also hunted with dogs. Not being swift of foot, he tries to escape by climbing a tree and is an easy mark for the gun of the hunter.

In size and shape the lynx is similar to an Irish water spaniel, having legs apparently too heavy for his body. His tail is about 4 inches in length and is tipped with black. His head much resembles a Maltese cat's, a fringe of hair passing from jaw to jaw; and his ears are tipped with a few long black hairs.

In color the lynx is yellowish gray, a dark strip passing down the back, the sides being spotted with black and the belly white. A hide when stretched will measure 5 feet 6 inches from tip of nose to end of hind foot.

It is hard to say which would be likely to be the aggressor in a conflict between an eagle and a lynx, but I have seen unmistakable evidence in the snow that these 2 do engage in mortal combat. By the lynx tracks and the eagle feathers it was easy to read that in this case the lynx had come off victorious and had capped the climax by making a meal off his late antagonist.

"Did you notice what a pleasant odor there was in that book department?"

"Yes. I presume it came from the spicy literature."—London Tit-Bits.

DOES THE LYNX DESTROY DEER?

L. D. GILMORE.

Lovers of legitimate sport must look with profound regret on the rapidly diminishing numbers of our game animals. The pot, market and hide hunters and the tourist ambitious of a record ally themselves with those forces which Nature has set to prey on the weaker side.

Taking the deer as the type of our game animals and examining the natural forces just referred to, we find that the most common, as well as most formidable, is *Felis concolor*, or the mountain lion. It is admitted by most hunters of large game and by students of zoology that in the rapid decrease of deer during the past few years the mountain lion has been a factor of no small importance. Are there not. however, among our *carnivores* others which relish venison, and whose depredations on the deer, though not so noticeable as those of the lion, still assume greater proportions than one would at first imagine?

Following is an incident which gave rise to the question in my mind:

Early one morning November last Frank and Charley Allen and A. W. Muckey, all of Dotsero, Colorado, while riding along the old Defiance trail below Dotsero, observed in the snow evidences of a fierce struggle which had continued for some distance down the hill side. Muckey dismounted, followed the course taken by the combatants, and soon came to the still warm carcass of a deer. Leading away from the body were fresh tracks of a lynx. The beast itself, its repast thus rudely interrupted, was seen, as it sped away, by the Allens, who were still sitting on their horses on the trail above.

A day or 2 later, being in the vicinity and wishing to satisfy myself with regard to a case, which, if true, I believed would be of interest to many, I found the carcass and carefully examined it. Contrary to my expectations there were no marks on the body to indicate that the deer had been wounded previous to its encounter with the lynx. Nor is that supposition probable, for no blood could be found in the bed where the deer had been lying nor along its trail. The only wounds on the body were those made by the lynx. It had bitten the front quarters through and through and unjointed them at the shoulder, thus totally disabling the deer.

Tracks in the snow told the whole story plainly. The fawn, for such it was, had been lying under a small cedar. Alarmed, presumably by the approach of the horsemen, it had risen and started up the trail. It had gone but a short distance when it came face to face with the lynx coming down the trail. The deer sprang aside, but too late; the lynx sprang as well and alighted on the deer's back. Then began the unequal struggle.

Either the force of the lynx's leap knocked the deer down, owing to the steep declivity, or else it threw itself down to get rid of the brute on its back. Whichever the case, it never rose again; down the hill they went, rolling over and over. But a little way and blood began to stain the snow; a little farther and the snow was crimson; another step, and the track ended in a pool.

Having this instance in proof, is it not possible that enough deer are killed by this smaller member of the cat tribe to materially affect their numbers? The fawns, of course, are the ones that suffer; indeed. I much doubt a lynx's ability to kill a full grown deer.

Since learning of the case here narrated I have discussed it with several old hunters. None could recall a similar instance; all expressed surprise; and some even doubted the truth of my assertions. All had seen many deer, old and young, which had been killed by *Felis concolor;* but by a lynx, never! Here, however, the question arises: Might not some of this work have been done by the lynx instead of the mountain lion? I should like to hear from some of our hunter-naturalists as to the probable correctness of my inference.

When courtship is over, it is over; when marriage is over, it is just beginning.—Exchange.

A DAY ON THE DELAWARE.

ZANE GREY, M. D.

Our summer outing slipped by swiftly, as only such days can, and the last one arrived. As we started out in the early morning the fog was rising from the river, and hung like a great grey curtain along the mountain tops; while here and there, through rifts, the bright sun shone, making the dew sparkle on the leaves. Far up the mountain side could be heard the loud caw of a crow, and the shrill screech of a blue jay. A grey squirrel barked from his safe perch in a tree by the roadside. A ruffed grouse got up from the bushes along the road, and with a great whirr, disappeared among the trees. The air was keen, with a suspicion of frost in it, and fragrant with pine and hemlock. This was to be our last day. We were going to improve every moment of it, and, perhaps, add more glorious achievements to memory's store, to be lived over many times in the dark, cold days of winter. I looked at Reddy and marvelled at the change a month could bring. He was the color of bronze and the spring of the deer-stalker was in his rapid step.

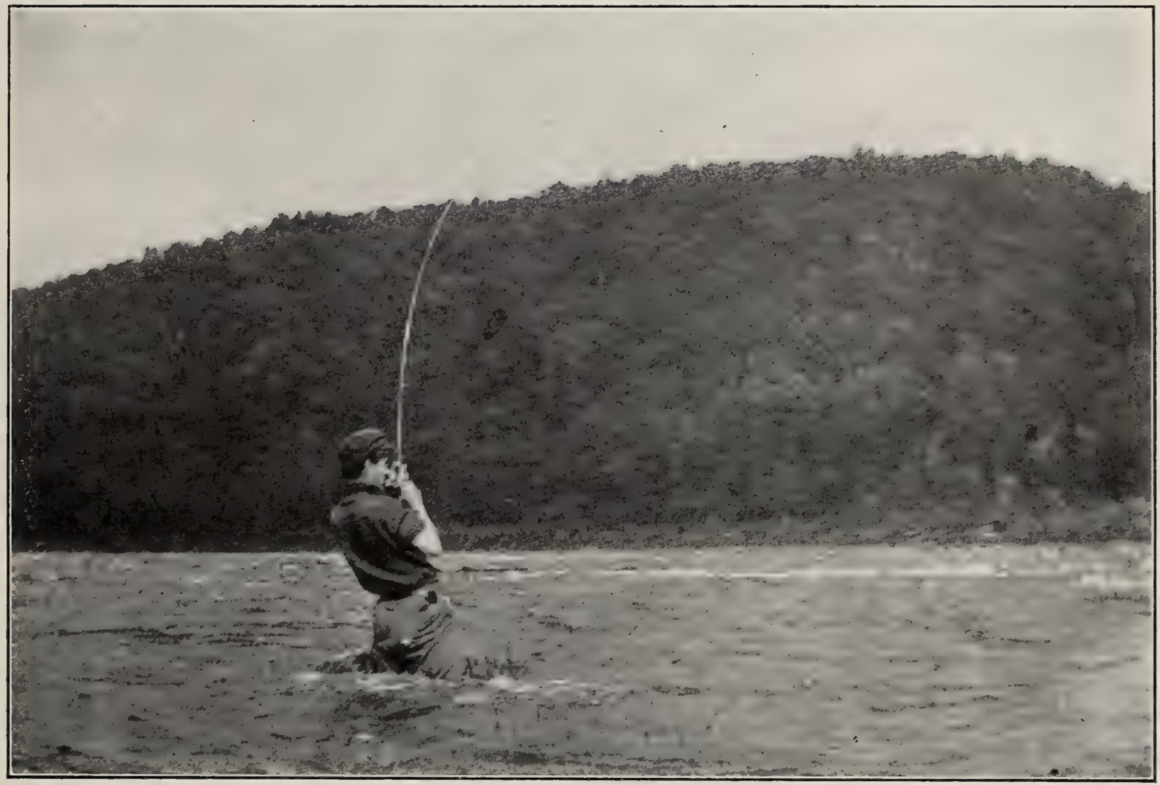
"Well, Doc, looks as if you were not going to get that big one to mount for our collection," he said.

"I am afraid not, unless I catch him today," I said. "We would have had him if it had not been for your childish and idiotic failure to land the big fellow you hooked the other day."

"I wish you would stop reminding me of that, and give me a chance to forget it," he answered. "I suppose you never make any mistakes."

"But it was so careless," I insisted, "to have a 4 pounder in your hands and then lose him."

"Yes, I know; but let's forget it. I hope you will hook one twice as big and that he will break your tackle and give me a chance to get a picture of you for future reference," he replied.



AMATEUR PHOTO BY R. C. GREY.

AT THE OTHER END A MONSTER.

At the lower end of the big eddy below Westcolang falls, the Delaware narrows, and there commences a 2 mile stretch of eddies, rifts, falls and pools that would gladden the heart of any angler.

"Now, my boy," I said, "we will toss for choice as to who takes the other side going down."

"I don't know if I would not just as willingly take this side," said Reddy, noting the swift water between him and the other shore.

"No," I answered, "that would not be fair. You know I am acquainted with the river, and the other side is the best, so here goes for the toss."

I won the toss and chose the near side, with a cheerful consciousness of my generosity which was not in the least affected by Reddy's suspicious glances. He was game, however, and waded into the swift water without another word; and he got safely across a deep place that had baffled me many a time. I stepped into the water, which was clear and beautiful, and as cold as ice. In a little eddy below me I saw the swirl of one of those vultures of the Delaware, a black bass, as he leaped for his prey, and sent a shower of little shiners out of the water, looking like bright glints of silver as they jumped frantically for dear life. It was a grand day for fishing, and the bass seized hungrily at any kind of bait I offered. They were all small, however, and, as I was after big game, I returned them safe to the water.

Occasionally I looked over to see what Reddy was doing. Usually he was up to his neck in the water and half the time his rod was bent double. I also noticed something that worried me considerably. It was a long, black object, and it floated from a string tied to Reddy's belt.

About noon we both made for the big stone near the middle of the river, where we rested and had our lunch. My fears were realized. That long black object was a 3-pounder, a beautiful specimen of the red-eyed bronze-back of the Delaware.

"Have you been fishing, or did you come along just for company?" asked Reddy, cheerfully. I made some remark about the luck of certain people.

Reddy was satisfied to stop then; in fact, he loafed the rest of the day; but I am a hard loser and I hated to quit. Five o'clock found us at the foot of the rifts with only one more hole to fish. It was the Beer Mug, a hole so deep that it looks black, and always covered with great patches of foam. It was a likely place for a big fellow, but I had never caught one there. Now I have memories of that hole which will never be effaced.

Reddy hooked and landed a big eel, which wound the 6-foot leader entirely around its slippery body. This made Reddy so tired that he said things which can not be repeated here, and quit for the day.

I caught 2 small bass and a sunfish. Then I tried a helgramite for a change. I fished the hole every way, but without success. I was reluctantly winding in my line, of which I had more than 100 feet out, when I felt a little bite and hooked what I knew at once to be a chub. I continued to reel in my line in disgust, when suddenly it became fast on something. It felt like a water-soaked log. I pulled and pulled, but could not get the line off. I did not wish to lose 50 feet or more of good line, so I waded out and down the side of the pool to a point opposite where I thought I was fast. Imagine my surprise when I got there to find my line going slowly and steadily up stream, through water that was quite swift. I could not believe my eyes, and was paralyzed for the moment. That chub was 6 inches long, probably, but he could never have moved the line in that manner. Reddy dropped his things and became interested in a moment, with his characteristic remark that "something must be doing."

Then I struck hard, for I knew I had hooked a heavy and powerful fish.

At the first rush he took 20 yards of line and pulled my tip under water. The reel went around so fast it burned my thumb. With one yell I settled down to business. I knew my tackle and that if the fish could be kept in that pool he was mine. He made for the head of the pool and then he went from side to side in short, furious dashes. My brother was yelling to me like a lunatic, and was running around snapping pictures of me with his camera. I controlled the fish perfectly for the first few moments of that struggle, and then, with what seemed to me a settled purpose, he started down stream for shoal water. Below were swift and dangerous rifts for wading and I knew if he got in them I should lose him. Twice I tried to stop him, but each time I saw the wet line stretch with the heavy strain on it as he tugged doggedly; and fearing it would snap, I had to follow him. I waded down stream as fast as possible and as I climbed over a big stone in my way I saw the fish distinctly in the shallow water below me. It was a pike, fully a yard long, and as his great yellow body flashed in the water, his head pointed toward the bottom and tail up, I groaned in spirit. He was not even tired, and there I was, in a dangerous place to wade, a 5-ounce rod in my hands, and at the other end of a silken thread a monster.

Wading over a bad place I lost my balance and my thumb slipped off the reel. At that critical moment the pike made his fiercest, maddest rush. It was all over in less than a second. My reel, being a 4-multiplier, overran, the wet line tangled and became fast, there was a snap, and I was looking miserably at a limp line that floated on the swift water in front of me. That was an unhappy moment.

As we walked down the winding mounttain road Reddy generously forgot his wish and tried to cheer me, but without avail. I could hardly see the beauty of the setting sun, going down behind the mountains in a red blaze of glory.

A BEAR AND A PISTOL.

A. M. POWELL.

During one of the long days of July, 1900, we were in latitude 63° and 64° North, on a high rolling spur of the Alaskan range Below us, about 5 miles away, was a beautiful lake, covering 2,000 or 3,000 acres; and 7 miles farther away could be seen Coolkana lake, which extended 15 miles beyond, to the Southward. A silvery thread of water connected those lakes, and following it along the foot of the spur we could plainly see that the source was in a large glacier to our right.

At that time of year that silvery thread was a large river, and a mile below the glacier it divided. Half its volume went through the lakes mentioned, to Copper river. The other branch turned Westward some 5 miles, then abruptly Northward, plunging into the heart of the mountain range.

That scene repaid us for the hardships we had endured. It was a revelation never before looked on by a white man. One stream reached the Pacific by way of Copper river; the other had apparently drilled a pass back through the mountains, and wound its course by way of the Tanana and the mighty Yukon to Behring sea. In other words, a salmon could ascend the Copper river through the rugged coast range, up the Coolkana to this source, and descend this West branch through another range of mountains to the Tanana the Yukon and the far North seas.

We descended and camped on the banks of this river, and spent a week exploring this West branch, which proved to be the East fork of the Delta river.

On our return we camped near the outlet of a beautiful lake. I had just picked up my revolver to kill some ptarmagin which were cackling near, when my companion exclaimed,

"Look at the bear!" A silvertip was lumbering along the beach of the lake, toward us, but on the other side of the outlet. I took my camera and slipped down to the edge of the water to get his picture. The light was just right, the lake scene was beautiful; the luxuriant grasses on the shore, with a scattering of spruce trees for a background, made this an opportunity of my lifetime. I was disappointed; the camera had been broken during the day's travel and would not work.

The bear was only about 40 steps away, and I decided to kill him. From a hidden position I gave him a mortal shot. With a yell he sprang into the air, fell, rolled and tumbled, biting the bullet hole, fighting the ground, brush and rocks. Then he darted into the brush, and by his fighting and growling I could tell where he was. In another moment he dashed out, and I sent

AMATEUR PHOTO BY H R. MONTIFIELD.

FORT YUKON, ALASKA.

AMATEUR PHOTO BY H. R. MONTIFIELD.

HAULING LOGS IN SUMMER, FORT YUKON.

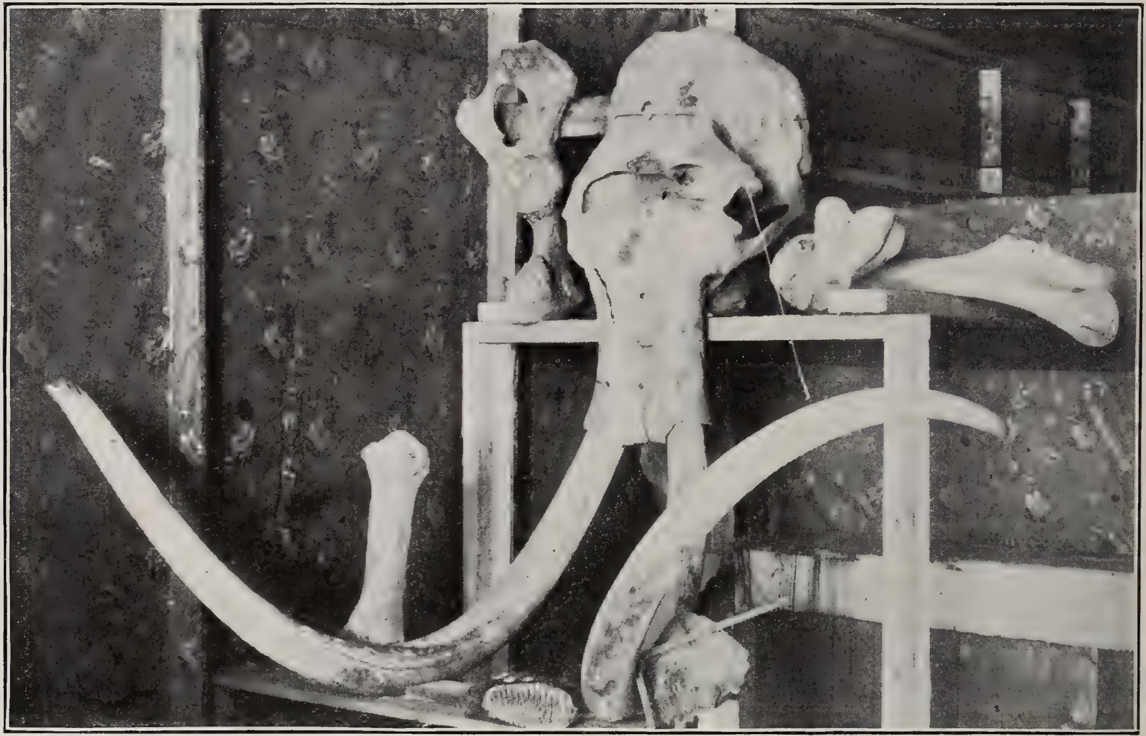
another bullet through his vitals. Again the performance was repeated, and when he again made his appearance it was at the foot of an embankment, which he tried to ascend; but there he stopped, stood up and looked around for the source of his trouble. Then a last deadener went crashing through his heart, and he gave up the ghost.

We had to swim our horses to get to him, but when darkness closed in, we had him dressed and hanging in camp. Every shot was a mortal one, but you have to give those fellows time to die.

We had *cached* our heavy supplies in the Mancomen country, hence we had several loose unloaded horses along. As I never did waste meat I resolved to take what we could kill on our return as far as the mining camp on Slate creek, about 30 miles on our way.

The next morning, while looking for the horses, we saw a caribou standing in the shallow water about 200 yards away. It was a long shot for a 6-shooter, and the first bullet splashed the water under him. He bounded off, but too late to escape, as I had the range; and the next shot added 200 pounds to our load.

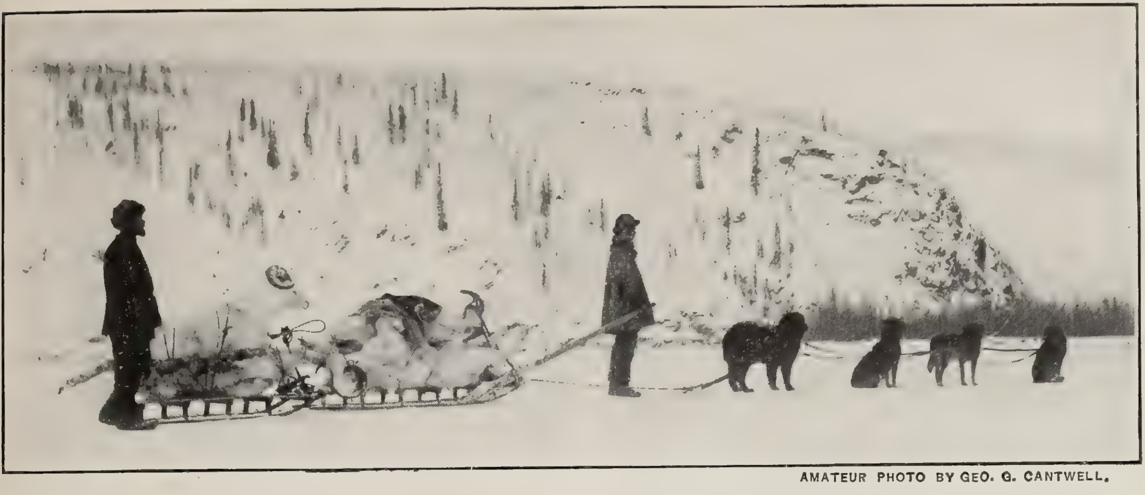
At one time that afternoon, we were traveling along a creek up which thousands of salmon were ascending. We were trailing in single file, myself in the lead, 6 pack horses following, and my companion in the rear. I had just shot a red salmon, tied it to my saddle for supper and remarked that it was a likely place for a bear, when out of the brush with a snort, through the water with a splash, and up the hill bounded a huge grizzly. He stopped about 145 yards away, and, a he stood looking down on me, he looked the monarch of the Northland. I dismounted and sent a hard bullet through his vitals. You could have heard him bawl if a mile from there. After the usual rolling and tumbling, he came for me like the wind. I sent another ball in front of his left shoulder into his heart cavity. Another bawl, roll and tumble, and again he came, I knew I was shooting for my life. His head was down and I shot for the top of his neck. If it missed the neck bone, it would reach his vitals. It did the work by shattering the neck bone and piling him up in a heap. I took 43 steps to where he fell.



AMATEUR PHOTO BY GEO. G. CANTWELL.

MAMMOTH REMAINS FOUND IN BOTTOM OF 55-FOOT MINING SHAFT, HUNKER CREEK, KLONDYKE, JANUARY, 1901.

My companion remarked that there had been only time enough to get in one more shot, and as he was unarmed and there were no trees within 10 miles it would be interesting if I would state what I had intended to do in case I had failed to kill the bear. I resolved never to shoot at a grizzly from open ground if he knew where I was. I broke that resolution about 3 weeks later, ran a foot race with a bear, and only made my escape by dodging and jumping down an embankment. It is a wonder to me now that I ever did go back



AMATEUR PHOTO BY GEO. G. CANTWELL.

WHITE MOUNTAIN SHEEP FROM UPPER KLONDYKE.

after my hat; but that is another story. This bear was a monster, and dressed about 800 pounds. We traveled all night in the rain to reach the mine, and the boys of that camp were made happy by a feast of fresh meat.

On this trip I used a 6 shooter, with long barrel and easy trigger, and shooting Winchester .44, smokeless powder and hard bullet. There is an ignorant class on one side of a pistol, and a disreputable one on the other, who think that the only purpose for which it was made is to kill their fellow men; but old mountaineers generally realize in it the best and handiest game gun in use.

AN IDLE FANCY.

CANDICE BRAMBLE.

In a country lane where the trees o'erlace
And the ferns grow tall in a shady place;
Where the choral choir joyous anthems sing
And the flags to the breeze their banners fling;
There a tale of love was one day told
To a shy briar rose, with a heart of gold.

The alder tall bends his stately head
O'er the fair faced flower in her gown of red;
And the sunbeams glint, where the breezes sweet
Cast spicy petals around their feet;
While he tells his tale with a stately grace
To the shy briar rose with her blushing face.

But though summer days are so passing sweet,
They haste away upon flying feet;
And today, as I walk in the forest lane,
I look for the lovers, but look in vain.
For the alder tall and the wild rose red,
Alike with the summer days, are dead.

Tommy.—"I am sure papa is dreaming about the seashore."

Mamma.—"Why do you think so, Tommy?"

Tommy.—"Because he snores just like the surf."—Judge.

AMATEUR PHOTO BY H. E. LOFTIE.

6 O CLOCK, P. M.

Winner of 27th Prize in RECREATION's 6th Annual Photo Competition.

AMATEUR PHOTO BY DR. J. B. PARDOE.

WILD RABBIT.

Winner of 24th Prize in RECREATION's 6th Annual Photo Competition.

WOODCHUCKS.

ERNEST C. ADAMS.

Photos by the Author.

If you should speak to a native of central New York or Pennsylvania of an American marmot, he would probably think you did not know what you were talking about. If you had an opportunity to point out the animal in question he would tell you it was nothing but a common woodchuck, or ground-hog, and it is not unlikely you would hear him mutter a few words about the "pesky critter" as he went into the house for his gun.

EXPECTING CALLERS.

The American marmot, or as he is better known, the woodchuck, though by no means so spry as his cousin the squirrel nor so quick witted as "Molly Cottontail," the rabbit, is nevertheless a most interesting little fellow. In appearance he is not strikingly attractive. His body is short, thick, somewhat larger than that of a full grown cat, and covered with coarse, red-brown, grizzled fur. His legs are short, the fore feet armed with long claws, which he uses in digging his burrow and in defending himself. His head is round, pointed slightly at the nose, and his bright, brown eyes are set wide apart.

He is a strict vegetarian in diet, eating clover, apples, and tender leaves, preferably young bean tops and pea vines, which has made the farmer his dire enemy. The woodchuck is a great coward unless cornered, when he will often fight with such fury as to rout animals greatly his superior in size and strength.

His home is but a hole burrowed in a hillside. It has 2 entrances, one a few feet lower than the other, to prevent his being drowned out by the spring rains. The entire length of the burrow is seldom more than 15 feet and is generally a single passage. Though a woodchuck may have 2 or 3 burrows which he occupies at different times in a year, there is never more than one animal at a time in a burrow, except the mother with her young. Some wise old woodchucks show great sagacity in the construction of their homes; throwing all the dirt out at one entrance, thus leaving the other almost unobservable. Into these holes they crawl in October, fat and sleek as butchers' cats, to emerge 6 months later, after having slept through the whole winter, as thin as the proverbial rail and with appetites that would do credit to farm hands. During the winter months they do not wake even for food, but are nourished by the fat they have accumulated during the summer. John Burroughs says, "Dig one out during hibernation, as Audubon did, and you find a mere inanimate ball, that suffers itself to be moved and rolled about without showing signs of awaking; but bring it in by the fire, and it presently unrolls, opens its eyes and crawls feebly about. If left to itself it will seek some dark hole or corner, roll itself up and resume its former condition."

THINKING IT OVER.

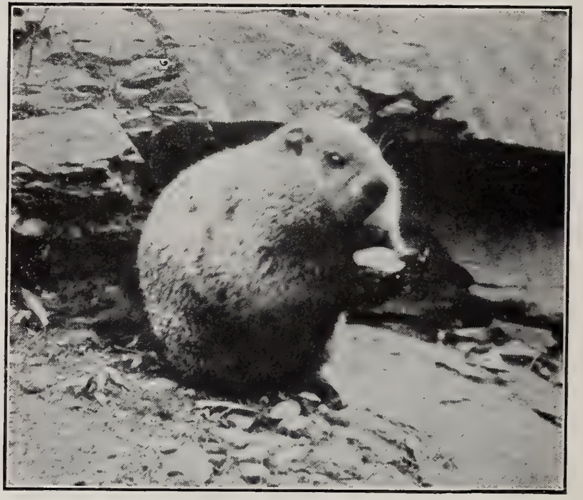
Last summer one of these creatures took up his abode temporarily in the rocks near my home in the Catskills. His hole was little more than a slanting crevice in the rocks; a sort of natural cave about 7 feet long with an opening at either end. A large apple tree overhung his front door and kept him well supplied with his favorite fruit. He occupied this hole as a kind of summer cottage during the apple season. Many times I have watched within a few feet of his door as he came haltingly out, eyeing

STARTING FOR A RAMBLE.

me curiously. As long as I kept perfectly still he advanced, but my slightest movement sent him scurrying back with a frightened whistle. After a time he became tame enough to take slices of apple I held toward him on a stick, but could not be induced to take them from my hand. As the season grew later he came out less often for the apples I used to leave on his doorstep. The second week in October he disappeared finally and I knew he must be rolled up for his winter's sleep.

The following story, told me by a friend from Greene county, New York, may show that the woodchuck is not always so stupid as some folks think. In his own words, "Last summer, as I was crossin' the meadow back of the house, with my rifle across my arm, I spied an old woodchuck on his haunches not 100 paces from where I stood. I raised the gun to fire when suddenly he disappeared. It surprised me a bit, but I didn't stop then to hunt him up. On 2 consecutive days the same thing happened. The woodchuck would sit there till I raised the gun and then disappear off the face of the earth. The third day I made up my mind to find out how the old boy did the trick; so 'stead o' raisin' the gun when I saw him I started walkin' up to him, sorter steady and keerful. There he sat like a stump till I was 'bout 2 rod away. Then I raised the gun slow like, squinted along the barrel and was just goin' to pull the trigger when he popped clean out o' sight, hind feet first. Well, sir, when I got to that spot wot d'ye s'pose I seen? There was a hole goin' straight into the earth about 5 feet down. Now, when he saw me a-comin' he run to the hole and stood up with his hind legs astraddle of it and waited till I raised the gun; then he just pulled his hind feet together and dropped into that hole as neat as any circus feller ever went through a trap door."

The pictures with this article are from photographs I took last summer. To obtain these took me a week of almost constant watching, and out of 18 exposures but 5 were successful. So timid was the little fellow that I was obliged to stand 30 feet behind my camera and operate the shutter with a long string. He did not seem to fear the camera until he heard the click of the shutter. That sent him back into his hole, but the picture was already taken.



LUNCH TIME.

While Bishop Potter, of the Episcopal Church, was traveling through Louisiana some years ago he addressed inquiries to his fellow passengers with a view of obtaining knowledge regarding the orchards and fruit interests of the State. "Do you raise pears in Louisiana?" inquired the bishop. "We do," responded the Louisianian, "if we have 3 or better."—Ex.

A RACKET IN THE ROCKIES.

A. L. VERMILYA.

Comanche Joe's hunting story, "A Modest Bag," published in December RECREATION, interested me greatly; and while I have never known a sportsman to tell an out and out lie, I am forced to believe Comanche has exaggerated slightly this trip. The account of his adventures seems straight enough save that part wherein he says his partner killed 3 elephants simply by snapping a cap pistol at them. This would have sounded reasonable had the pistol gone off, for I once bagged a rhinoceros, 11 ostriches and a spike-horn alligator with one shot from a Roman candle; but Joe's story is preposterous and will not hold water. Come now, Joe; hadn't you been putting a new faucet in the cider barrel just before you and your pard went after those elephants?

But Joe's story leads me to believe that an account of an adventure which Dave Butler and I had last fall, while hunting grizzlies in the Rockies, might be of interest to the fraternity. Dave is a good chap, with a childish weakness for grizzlies; and when not engaged in hunting them is chiefly employed in running a hardware store, raising a large family of pretty girls and smoking a doubtful looking cob pipe. Dave had never shot a grizzly; but once, when running away from a jack rabbit, which his fevered imagination had magnified into a mountain lion, he caught his foot in a bunch of buffalo grass and fell on a prairie chicken, which was setting on 119 eggs, smashing the whole outfit. This was not exactly shooting grizzlies, but it was so near it that for some time after Dave was real proud of the exploit.

But about our hunting trip. Dave and I started out from camp one morning just after sunset, and as the moon was shining brightly we concluded to strike across the plains to a place where we often hunted prairie chickens. We thought we would bag a few chickens, and then shoot our grizzlies on the way back to camp, so as to avoid having to carry them with us all day. A dozen good sized grizzly bears make quite a load, as all old hunters know.

We were in a beautiful part of Montana, about 300 miles East of the Rockies. There was not a bush nor a tree in sight, and we were looking sharp for chickens when my pard, thinking he saw a pronghorn grizzly, took his corncob from his mouth and, taking careful aim with the pipe, fired at the supposed bear. Then he climbed a tree and awaited developments. His shot knocked a horned toad off from a boulder about 20 feet away, but did no further damage; while his grizzly turned out to be nothing but a sacred cow, which had wandered away from Barnum's circus while that unparalleled show was giving an exhibition in Yuma, Arizona, the day before.

We went on, and had traveled about 47 miles, when the sun was darkened by the greatest flight of penguins it has ever been my good fortune to see. They were probably on their way to the North Pole to vote, and didn't care for expenses. These birds so completely obscured the sun that the moon rose—though it had set but an hour before. That was the only time I remember having seen this luminary rise more than once in 24 hours.

Dave got rattled, and stepped behind a tree to light his pipe. He always fills and lights his pipe when he gets rattled; but in his excitement he got the bowl in his mouth, which made him hot. I banged away into the flock, and as I had a pump gun, loaded with a pound and 16 ounces of hollow point bullets, I brought down a perfect shower of birds. In falling one of the pelicans lodged in the barrel of my gun, which happened to be pointed upward; and as I had left my ramrod in camp, and so could not remove the bird, I put a fresh cartridge into my gun, intending to shoot the ostrich out later.

We picked up 627 penguins and were putting them into our game bags when, chancing to look up, we saw a number of enormous grizzlies coming in a line, along a narrow canyon between the mountains, only a few rods away. Dave grabbed his pipe and, pointing it in the direction of the approaching bears, pulled the trigger; but finding the mainspring broken, he lit out for camp at a gait which allowed him to touch the ground but once in each 27 and ½ rods. However, I was used to grizzlies, and proposed to fight it out on that line if it took all winter.

About 40 rods from where I was the canyon made a sharp turn, and around this corner, just as I would think the last grizzly had appeared, would come still another. The foremost bear in the line was now only about 20 feet from me and I could delay no longer; so taking a hasty aim, I fired. But I had clean forgotten about the wild turkey in my gun, and this was mighty lucky; for in the crop of the bird happened to be a smooth, round pebble, which exactly fitted the bore of my gun, and which proved a more powerful missile than any case hardened, ball bearing, steel jacketed bullet ever made. The bears were in line when I fired, and at the discharge of my trusty muzzle loader they all went down, and, after feebly waving their off hind legs, expired.

But what surprised me most of all was to see that pebble, after going through all those bears, stand dancing and spinning in the air, like a sea sick bumble bee or a meteor with a jag on. But the intelligent projectile knew its business. It was waiting for more bears, and, sure enough, in about half a minute, around the bend came another grizzly. When he came in line the gritty pebble skipped through him like a buckshot through a rotten pumpkin, and bruin waved his off hind leg and expired, as the others had done. Two more bears came around the corner after that, and were similarly dispatched. Then, as there was nothing more to do, the pebble whizzed on and shattered itself to pieces on a mushroom half a mile away, killing a skunk and scaring a rattler so bad he glided away, forgetting to take his rattles with him. I fastened a handle to the deserted tailpiece, making a rattle box, and my 2-weeks-old baby is sitting on the floor playing with the novel toy at this moment.

I gathered up my bears—there were 113, and not one of them weighed less than 1,200 pounds—and stringing them on a willow twig as a boy would string bullheads, started for camp, well satisfied with my day's sport. When about half way home I met Dave coming to see how I had made out. He explained his unceremonious departure by saying that just as the grizzlies appeared he remembered he had left his toothbrush outside the tent that morning; and, thinking that a porcupine might eat it, he had thought it best to go back and look after it. I readily forgave him, for Dave is a decent fellow in the main, and together we toted our grizzlies into camp. That evening we dined sumptuously on bear claws, having all we could eat and some left to warm over for breakfast next morning.

AMATEUR PHOTO BY GEO. G. CANTWELL.

RAVENS

DOWN THE MOON RIVER.

L. S. WILSON.

One day that overshadows others spent on a summer trip in the delightful Muskoka country, is Moon river day. Doubtless there are many streams equal in picturesqueness to the Moon; streams on which just as delightful days may be spent; but I have not seen them.

The Moon and the Muskosh rivers deliver the waters of Lakes Joseph, Rosseau and Muskoka into Georgian bay. These waters fall 20 feet or more at Bala, at the extreme Western shore of Muskoka lake, over rocks and boulders, and for 2 miles form the Muskoka river, which, after that distance, is known in its Northern branch as the Moon river, and in its Southern stream as the Muskosh. Both are wild. They make their crooked ways through forests of pines, hemlocks, and oaks, these trees towering high above a mass of tangled undergrowth through which, it seems, man has never passed. Fires of long years ago, perhaps in Indian times, have left their marks in many places; and tall pines, straight as arrows, devoid of all green, lift their heads, which have been washed by he rain and bleached white by the sun, high above the second growth. They belong to the old guard. The beds and shores of these rivers are rocky; falls and rapids abound and add much to the charming wildness.

The Moon is a narrow stream. The impression is that it has literally forced its way through the forest, cutting its irregular course in many places through solid rock. You glide along for miles between woody banks and moss covered rocks without sign of man. There are no villages, no camps, no sound save voices of the wood birds, the musical running of the rapids, the tumbling of the falls and the constant dip of the paddles. You feel that you are viewing a creation of nature's chief landscape gardener. You are a congregation, all by yourself, small but attentive and appreciative, to whom the great preacher is delivering a mighty sermon without words. You will not forget it. In after days you will, perhaps, contrast it with the spoken word from the desk in some grand church and that silent sermon will be with you still, strong, refreshing and inspiring.

A PORTAGE ON THE MOON RIVER.

FISHING ON THE MOON RIVER.

Bala, on Lake Muskoka, is the starting point for the Moon river trip. Guides who are familiar with every rock in the channel, who know which lively rapids are not safe to shoot, will, for a reasonable sum furnish neat canoes and paddle where you will. You will not, in all probability, see a living soul after once fairly away on the trip. Start early. You will require no advice about returning. If you have never experienced the delight of a canoe trip, then there is a new sensation added to all the wealth of scenery on view wherever the eye turns. If the trip is made in the spring, and sometimes even as late as July, you will see the river drivers logging between Bala and the junction of the Moon and the Muskosh. After passing the Muskosh do not expect to hear the voice of man other than your guide. You are entering a wilderness of woods and rocks. A solitary bushranger may call from the shore and ask you if you are going far, and warn you to carefully extinguish fires built at lunch hours; but the probability is that you will not see or hear even him.

Once in the Moon you will be enthusiastic over what appears to be a quiet little stream, and will wonder if, indeed, falls and rapids are before you. Ere you have ceased wondering, you have your answer; you hear a roar and in a moment your guide is saying, "We will have to make a short portage here." The carry is necessitated by the falls, and a dam is constructed to force more water through the Muskosh, to aid the running of logs to Georgian bay.

You "carry round and put in" and are off again. Another half mile or so and you approach a rapid too swift and too stony to run. A little farther on what is known as the Island portage is reached. Here great rocks rise in the center of the river, creating rapid currents on either side, the water rushing and foaming over sunken boulders that forbid the safe passage of canoes.

Your guide may ask before you have covered an additional 20 rods,

"Care if you get a dipping?"

Answer him as you like, but if you say "No," he will shoot the next rapid. Give him your assent and have a swift ride down the watery slope. The stream has a treacherous look, tumbling as it does over rocks and making a slight bend, but the strong hands at the paddle will safely carry you through. If fishing be one of the objects of your outing, the canoe will be run upon a bit of marshy land at the foot of the rapids and you will chase a lively breed of frog. In season, this low land is feeding ground for deer.

Once more in the canoe, you move quietly along, making many short portages. Each time you step on land you note the density of the woods, the impassable tangled underbrush and the queer shale rock formations. These portages give most welcome varieties to the trip. At about 10 miles from Bala, your guide pushes up a short stream and sticks the nose of the canoe into a patch of rushes. He crowds the little craft through tall, coarse grass and water lilies for 100 yards and then enters 'Longe lake, noted in that region for its muskalonge. It is a small lake, with its shores well wooded, and you will have poor luck indeed, if, after an hour, your patience is not rewarded by fish that are fish. A 10-pounder is about the average, and he will give you a tug that will repay you for the journey, if you have not already felt repaid 100 times.

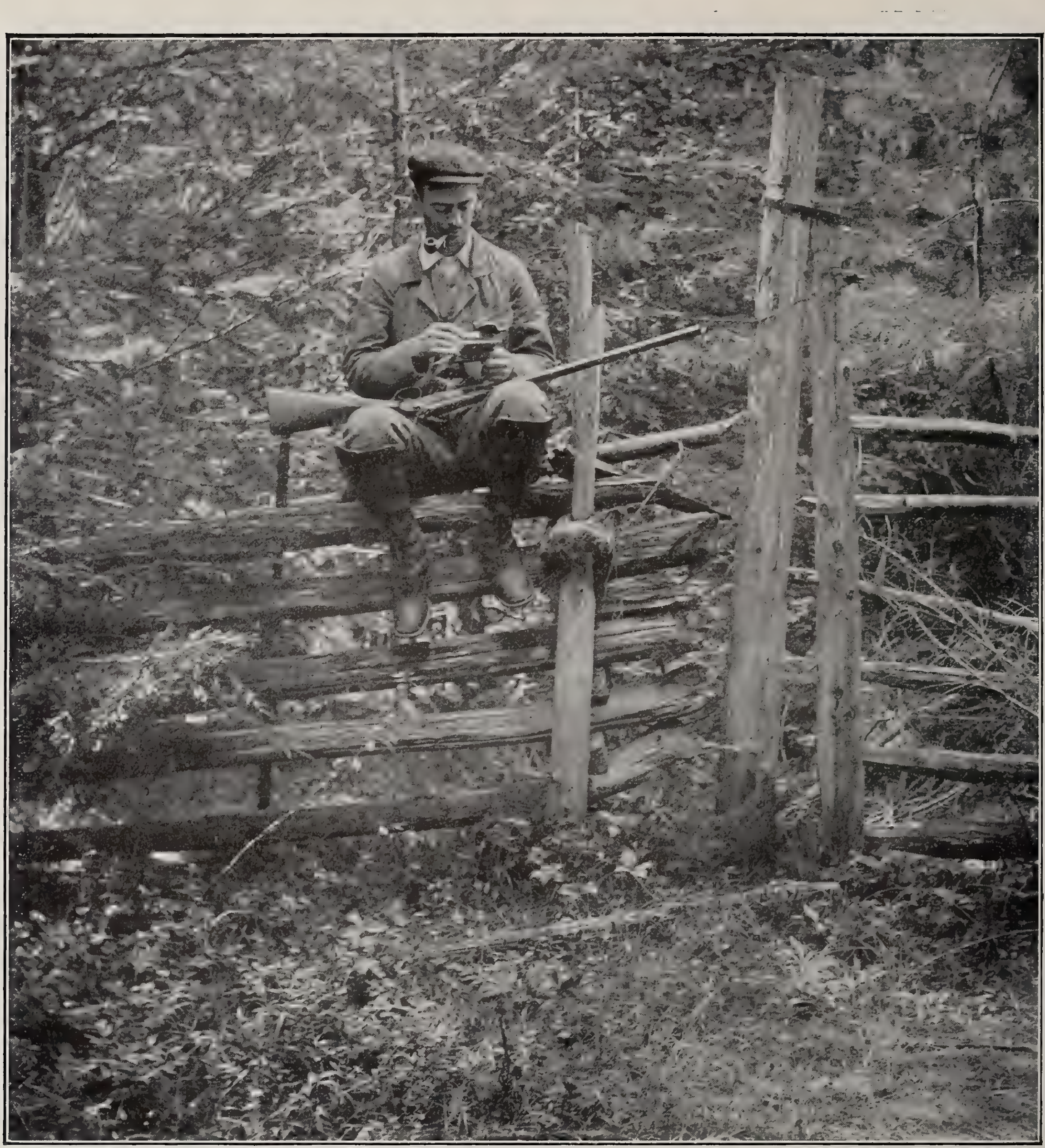
Back into the river, you rest at one of the falls for lunch, casting for bass above and below the falls with success always. You can go through to Georgian bay if you like, and back to Bala by the Muskosh, a sterling canoe trip requiring 3 days or so. Nearer the bay the falls are more abrupt, the rapids more swift, the portages longer, but the grandeur of the scene remains until you reach open water. A good day's trip is to 'Longe lake and back to Bala. The return with the slanting rays of the setting sun lighting the tops of the trees, with the river's quiet pools and little bays acting as mirrors for the perfect reflection of everything on the shore line, and with gulls, cranes and owls in view as you glide along, makes you conscious of a restfulness peculiar in its charm, that you wish might be abiding. It can not long remain. Like all good things, it too, has its end.

It has its end in fact but not in fancy. Memory will retain the scenes of such a trip and permit us to bring them up when winter winds are blowing and when ice and snow hide stream and field. We may see in the grate fire before us the summer blue of the sky the sun tinted green of the woods: hear the delightful ripple of the winding brooks and the restful songs of the birds. Nature speaks at all times in every season to those who are alive to her charms. Her summer voices to the many are most melodious, but even cold, bleak, December's voice, though often harsh, has in it no discord for those who hear aright.

If all memories ended with our summer vacations what little rest or enjoyment would our outings afford. The good that comes from living over a delightful experience, had in close communion with generous nature, is not to be counted in dollars. How rich, then, is one who, having seen, has retained the wondrous pictures to be viewed on every side during a vacation wandering in this matchless region of the Muskoka lakes.

MOUTH OF THE MOON RIVER.

COURTESY OF THE GRAND TRUNK RY.



AMATEUR PHOTO BY C. W. LONG.

A HUNTER'S SOLACE.
Winner of 10th Prize in RECREATION'S 6th Annual Photo Competition.
Made with Anthony Platyscope lens and Carbutt plate.

"I saw Mrs. K. going into an auction sale last Monday. Isn't her craze for bargains extraordinary?"

"Yes, indeed. I believe she could die happy if she knew she would be laid out on a bargain counter and buried as a remnant."—Town and Country.

IN THE HELL CREEK BADLANDS.

WILLIAM T. HORNADAY.

We returned from that trip October 26, 1901, and the farther I get from it, the grander it looms; but I would be willing to give up the half of all it was to me, and did for me, if I could make it possible for every man who calls me "friend" to have one just like it.

I am willing to sketch the outline of that trip, not because of the record we made, for we made none, but for the sake of imparting a lesson to others situated as I was last September. It is not a tale of exploit. and blood; far from it.

Having at last reached a point where my brain had become dead to the world, there was only one thing to do—take a rough-and-tumble hunting trip in the wildest West to be found. We decided that it should be a badlands trip, and one of no common sort.

My old buffalo-hunting comrade, Jim McNaney, had told me that in the Hell creek country—"the worst badlands in all Montana"—there were mule deer in fair numbers, and scenery to burn. There were also a few mountain sheep and antelope; but, happily, both these species are now protected for 10 years, and not to be killed by honest men.

Someway, it always makes me feel about 10 years younger to start West over the Northern Pacific. From Bismarck to Seattle, every foot of the line possesses the charm and romantic interest that attaches to travel in a new world. Had I the space to spare, I could give that road a fervid and sincere free advertisement. Every time I ride up the Yellowstone valley and over the Rockies, it seems to me that my friends need to be told about it all, and sent over the line. At Billings Mrs. Hornaday once camped on the rear platform, and I had to drag her into the car, by main strength, to keep her from freezing.

The head of Hell creek is about 120 miles Northwest of Miles City, and 14 miles from its source it flows into the Missouri. By a strange juxtaposition, Snow creek runs a close parallel, Westward,

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THE BADLANDS OF HELL CREEK.

Looking Northeast to the Missouri River from Panorama Point.

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WHERE THE TRAIL ENDS.

and between and around the 2 the badlands are grand beyond compare. Coming up from the South, the divide between Big Dry creek and the Missouri river vallay rolls up smooth, gradual, grassy, and almost without a landmark. When you reach its summit and gaze off toward the North, you see at your feet a 5-mile stretch of smoothly rolling tableland covered with rich grasses a foot high. Then it breaks all to pieces. Down go coulees, gulches and canyons, jump after jump, in rapid succession, until the level mesas are hacked into ragged and awful chasms hundreds of feet deep. Between these stand the sharp, high points of the mesas, like gigantic wedges of land which have split Nature asunder.

On the way up, a messenger came post haste after us, having ridden day and night. Jim, Huffman and I were all married men, and fathers; and it was minutes before any of us had the courage to ask "Calico Charley" which of us was the one. Finally he said:

"It's you, Jim! Maggie's awful bad.

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MAX SIEBER, WOLF HUNTER; HIS DUG-OUT STOREHOUSE AND HIS VISITORS.

There must be an operation this afternoon, shore, or she can't live."

This was at the L U-bar ranch, and 7 o'clock in the morning. Jim mounted Bull Pup, his best horse, took a handful of cigars, a box of matches, and galloped away. At 4 o'clock that afternoon he reached Miles City, 70 miles away, without changing horses. Sorry was no name for what we felt, though not for ourselves. Huffman, the cook and I went on alone, to find Hell creek as best we could, hunt deer and return. I was elected foreman and became assistant horse wrangler, all in one day.

After leaving Jerdon's on the Big Dry, we saw not a human soul *en route,* and having missed the dim trail we were told to follow to the Egad ranch, we presently found ourselves we knew not where. We swung half way around old Smoky butte, the finest landmark in all that region, in a semi-circle, having a radius of 30 miles, and at last reached the top of the Big Dry-Missouri divide. In doubt and wonder, we followed a dim trail 20 miles, knowing that it led toward the badlands; until at last it ended abruptly at a picturesque log cabin standing on a steep hill side 70 feet above—Hell creek! It was the jumping-off place of wagon transport. By sheer good luck we blundered straight into one of the finest spots in all Montana for hunting and picture making. All the ranchmen on the North side could not have piloted us to a finer location than the one found by intuition.

Max Sieber is a "wolfer," and a ranchman besides, and he was nice to us throughout our stay. He is a solitary old bachelor, with no end of interesting history as buffalo hunter, Texas cowboy, and wolfer. His ranch buildings stand above the best spring in all that region, and at the edge of the richest grass lands I ever saw in the West. The high, rolling upland was covered with spear grass and bunch grass nearly knee high, and our horses stuffed themselves with it nightly, until they could hold no more. Here is where the big buffalo herds used to lay on fat in the fall before migrating farther South in the winter.

At "Wolfer's Roost," the grass lands break off into fragments, and from there to the Missouri river and beyond the badlands simply defy description. Huffman's splendid photographs tell their story as words of mine never can; and if ever I gave thanks for the presence of an expert photographer, it was there. The 5 x 8 pictures he made on that trip, 36 in number, are the "finest ever," and had I been compelled to choose on the spot between pictures and game, it would have been pictures by an overwhelming majority.

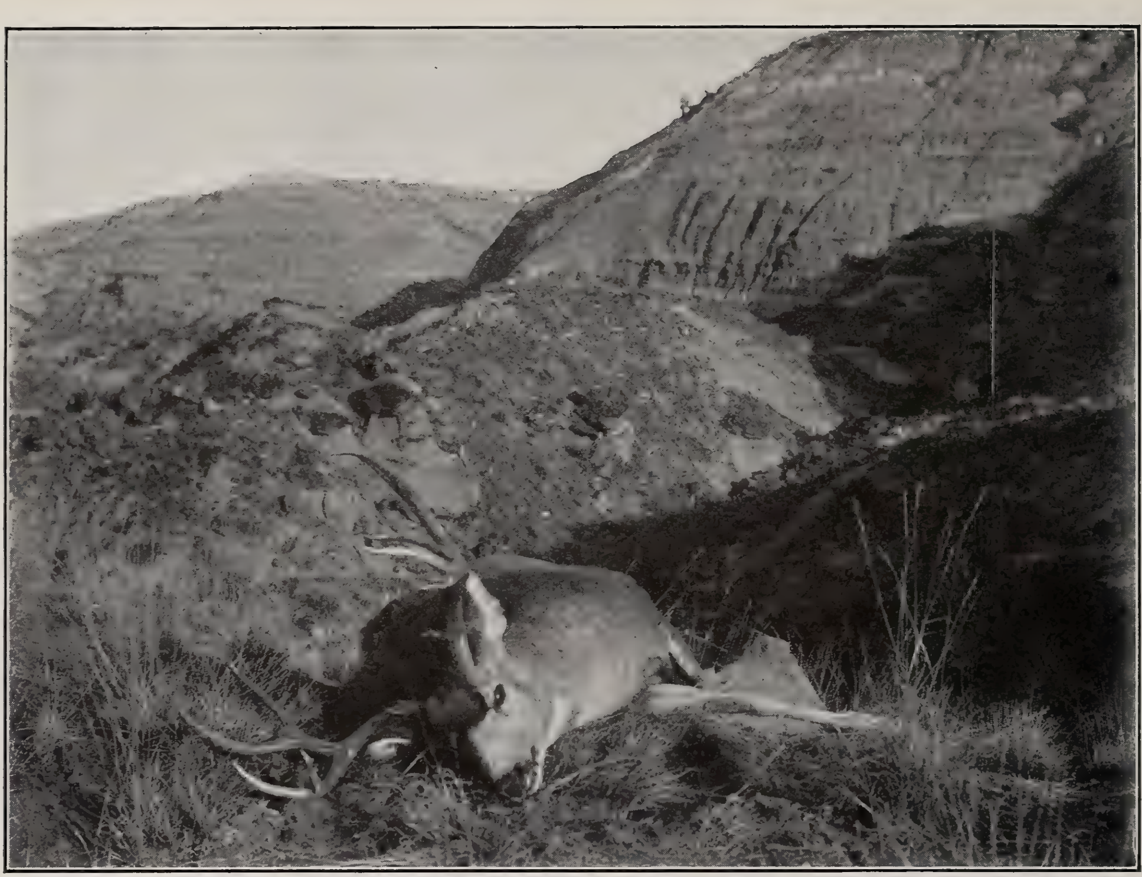
Every hunter who has not yet hunted the mule deer in really magnificent badlands, has something coming to him from the hand of Fortune. The hunter does not live whose soul would not be thrilled by the sublime spectacle of those miles upon miles of ragged chasms, and the fantastic heights that rise between them. At a hundred points, the level mesa breaks off in sharp, wedge-like headlands, which thrust out into space and drop far down to the canyons where the pines and junipers find shelter for their roots. There are sections of canyon walls so built up and so high placed that they look like ruined castles from the heights of the Rhine.

The artistic effect of the dark, green pines that are sprinkled through the gulches and over the butte sides, is of great value in toning down the rugged aspect of the badlands. Great beds of trailing juniper cling here and there like clumps of dark green moss, to soften the harsh angularity of the rugged ridges. Nature knows the artistic value of contrast quite as well as man.

Four miles Westward from Hell creek, the ragged gulches and angular ridges give way to a series of long, rolling billows of land, smoothly rounded at all points; and the valleys between are well filled with pines and cedars. In contrast with the rougher regions, these are as soothing and restful to the eye as the vistas of an English park. Here we found bunches of mule deer does feeding, and straightway Huffman called the region the Does' Pasture. All these ridges and gulches and canyons terminated in the narrow, level valley of Snow creek, through which the stream wound to and fro, its curiously regular sinuosities marked by a golden chain of young cottonwoods, fast dropping the last half of their autumn leaves.

East of friend Sieber's ranch, the badlands were still different. Over a wide stretch of fairly even country, rose isolated groups of tall buttes, mountains in miniature, a mile or so apart. Among the blasted spur roots of these desolate monuments, the solitary mule deer love to hide and feed on the rank clumps of narrow-leaved mugwort that grow in those sterile situations. At that time all the bucks we found, save one, were in this country of scattered buttes, and all the large bucks were solitary. The bucks and does bunch in November.

It was on our first trip into this region, and only 3 miles from our camp at Sieber's ranch, that I made my score. Huffman was prospecting alone half a mile distant. Sieber and I were together, and just after picking up the front horn of a triceratops (for particulars see Mr. Lucas' "Animals of the Past"), Max said, "If you will come up to the top of this butte with me, I will show you where I missed a fine, big buck last winter."



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THE BIG BUCK AS HE FELL AND THE HUNTER AS HE STOOD.

I thought, "Oh, hang the buck you missed last winter!" but I didn't say it; and solely to please a kind friend, I scrambled up at his heels to the top of a hogback. Along this we walked while it described a capital S, 300 feet long. At its extremity it rose in a bald, round dome of blasted earth, 50 feet higher, and up this Max climbed quite to the top. Raising his hand, he pointed down the farther slope, into a ragged notch, and said, softly, "He was standing right down yonder in—look! look! There's a deer there now! But it's a doe!"

Down he crouched; but I peered over. We had all pledged one another not to shoot a doe, under any circumstances. I plainly saw the high light on a pair of antlers.

"No! It's a buck! I see his horns!"

Bang!

I felt sure he was mine.

He leaped just twice, and then went down to stay. By the time we reached him, he was quite dead. Sieber said afterward to Huffman, "It was as purty a shot as I ever saw made, close behind the shoulder, and a bull's-eye."

The distance was 150 yards, almost exactly the same as that at which Huffman killed his big buck. If anyone wishes to inquire into the truth of this remarkable coincidence, the address in full is M. A. Sieber, Jordan, Dawson county, Montana.

The death of that fine animal in a wild and rugged landscape, and by a single shot, gave me all the blood I cared to shed on that trip, long though it was.

Sieber said it was "a mighty long way to come to kill one buck, saying nothing of the hard work and the expense"; but all the conditions being right—the buck eaten there, and his head mounted here—what more could I ask? It was quite enough.

As a brain fixer and a health giver, that trip was one of the finest I ever had in any country. Huffman and I worked like slaves, ate like hounds, and slept like bears in January. Incidentally and all the time, he was as fine a hunting companion as I ever camped and shot with; and that is putting it strong. In spite of the fact that he set a hot pace for me, and kept me hustling hard from dawn until dark, he was ideal.

We whirled back to Miles City over splendid roads, in 3½ days, our heads clear, our muscles hard as whipcords and our hands so stiff from hard work that for a week they could not shut on anything smaller than a gun barrel. At the L U-bar buttes, at almost the same spot where he had to turn back, we met Jim McNaney galloping out to meet us. The only cloud on the whole trip was the loss of Jim to us, and the loss of the fun to him. Whoever has Jim for a guide and companion on a hunt is in great luck.

THE SIMINOL PIRATES.

CHAS. B. WEMPLE.

On the extreme South of the Sulu archipelago, a short distance off the Northern coast of Borneo, there is a small group of islands known as the Siminols. On the largest of those islands is a little walled city inhabited by Moro pirates. For years they were the terror of those waters. Sometimes they ventured to attack small coasting steamers; but generally they hunted easier prey, robbing Moro fishing boats and the junks of pearl hunters.

During the American occupation of Bongas island, a little West of the Siminol group, frequent complaints were made to the commanding officer of the depredations of these pirates. Each time he would order the Datto of the Siminols to surrender the men accused of robbery on the high sea, and each time the Datto would report that he was unable to capture them. When at last the patience of the commandant had been tried to its limit, he determined to go in person, and see what could be done.

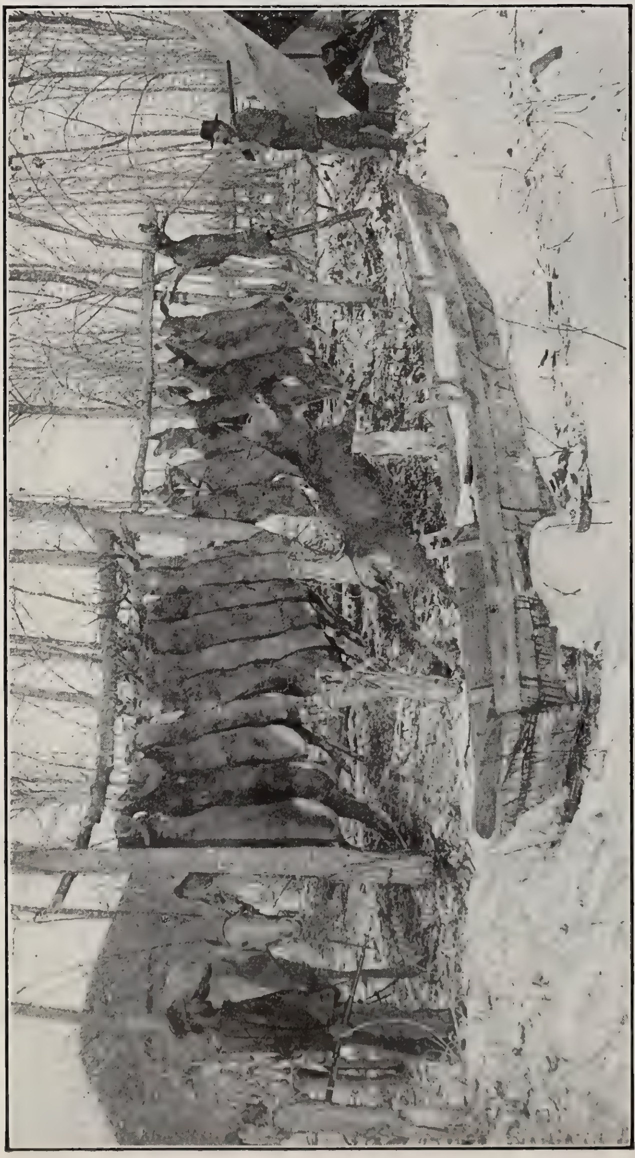
August 4th, 1900, with 25 men and rations for 10 days, he took the launch belonging to the quartermaster's department at Bongas, and started for Bangcubula, the stronghold of the freebooters. The voyage of 27 miles was uneventful save for a little heavy weather and some seasickness. At its destination the little force went ashore and straightway demanded of the Datto of the town the surrender of the accused pirates. That officer, seeing the uselessness of refusal, sent for the men wanted.

While we were waiting for them to come in, there was a sudden thunderous roar from a rude stone-walled fort in the highest part of the town. From the noise and the fact that showers of gravel occasionally flew high over our heads, we surmised we were under fire. We were ordered to deploy as skirmishers, and charge the fort. We did so, advancing under showers of scrap iron, stones and miscellaneous junk fired from old muzzle loading cannon. Not a shot was fired on our part, and no one was hurt. When we reached the fort, we found nothing but the smoking relics of primitive warfare; the braves had fled.

The Datto, however, rounded up the men we wanted, as he could have done at any time had he so chosen, and turned them over to us. We took our captives back to Bongas. They were tried by court martial and sentenced to 2 years imprisonment at Jolo. In addition they were fined $700, Mexican, each, and all their boats, guns, etc., were seized. Two of their sloops, renamed and slightly remodeled, are now used as dispatch boats between Jolo, Bongas and Siassi.

Made with Bausch & Lomb Zeiss Anastigmat Lens and Ray Filter

PETRIFIED BILLOWS OF SOUTH DAKOTA BADLANDS.



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THE GRUNT OF THE GAME HOG.

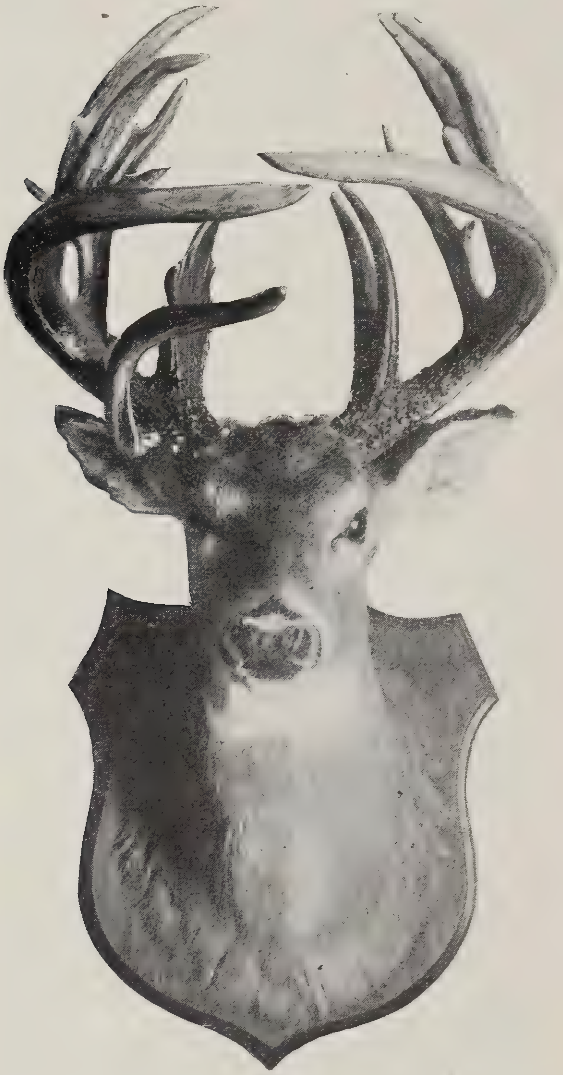
WILLIAM J. LAMPTON.

Behold Me,
I am the Game Hog;
But just the same,
I am not as game
As I am hog.
I couldn't well be,
Because, you see,
It is my will
To kill
And kill
And kill
For sake of the killing only
To slaughter for slaughter's sake,
To ransack the field,
The forest and river and lake.
No bird in the air,
No fish in the sea,
No animal on earth
Is safe from Me.
I pile the plain
With what I have slain,
The inland woods and the shore;
And the more I shoot,
The more I root
For more and more and more.
The sportsman kills
As a gentleman should,
And when he has met his need,
He finds no fun
In using his gun
To gratify a greed.
But Me?
Well, you see,
I'm a hog, I am,

And I don't givadam
How many I get,
And I never let
A thing get away
From my gun-play.
What is the game for,
But to kill?
What are the birds for,
But to fill
My insatiate bag;
And I never lag
In doing the whole stunt
When I go out to hunt.
And when I have killed
All there is in sight,
I pile them up
To their loftiest height,
And take my place
Beside the pile
To have my photo taken.
My smile,
Just then, is something
You ought to see
To make you pleased
With my work and Me.
By gosh, it takes
A photograph
To show just how
I get in my gaff
On the helpless things
I slaughter for fun
With any old thing
You can call a gun.
Oh say,
Don't I look gay,
Done up in that slaughter-pen way?
I'm a Game Hog with a greedy grab,
And quite well known to fame,
I haven't got bristles on my back yet,
But I get there just the same.
See?
That's Me.
Gee whiz,
What a hog of hogs
The Game Hog is.

A FREAK DEER HEAD.

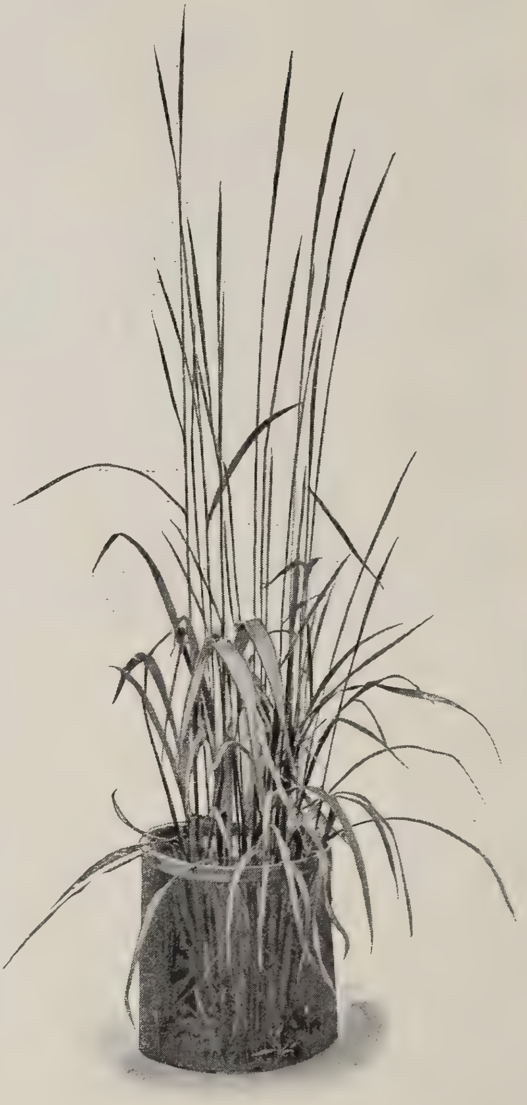
I have just returned from my first deer hunt of the season with my 3 deer, and I have earned them 3 times over. It is no small task to travel miles to jump a deer, and then pack the carcass 3 or 4 miles to camp, over windfalls, blowdowns, up hill and down, through muskeags, etc. However hard was the work we thoroughly enjoyed the outing, and are looking forward to the time when we shall meet again on the same ground in Northern Minnesota.



I found the raven, moose bird, ruffed grouse, 3-toed woodpecker, pileated woodpecker, hairy and downy woodpecker, red-bellied nuthatch, hawk-owl, horned owl and chickadee common in Ithaca county.

I enclose picture of deer head I mounted last season. You will notice that the branches cross by about 1½ inches in the front, and there is an extra parallel lower branch. I have had many heads, but this is the most remarkable one of all.

H. W. Howling,
Minneapolis, Minn.



AMATEUR PHOTO BY D. W. HALLAM.

WILD RICE GROWN BY CHAS. GILCHRIST, PORT HOPE, ONTARIO.

THE BUGLER FROM THE PEAKS.

RICHARD BURTON.

What is this cry that sudden seems to shake
The keen, still mountain ether wide awake,
Until the vast and candid snows of night
Sound vibrantly on every doming height?
Hark, how it swells! The very stars do hear!
This upper fastness reads the message clear;
Her ancient language Mother Nature speaks:
The bull elk bugles midst the topmost peaks!

—The Criterion.

HUNTING FROM THE GOFF CAMPS.

WARFIELD RYLEY.

I went to Colorado Springs for health. Having found it, I decided to go after big game, and because Goff was called the most successful hunter in the State I put my case in his hands.

I left the Springs September 1, and after a day of traveling through the grandest scenery I had ever beheld I reached Rifle, whence I took the stage for Meeker.

Next morning we—there were 3 of us—started for Goff's deer camp, 25 miles distant and 6 miles Southwest of Sleepy Cat mountain. We got there in time for dinner and had our first taste of venison. The afternoon we spent getting acquainted with Goff and inspecting his camp. He is a great hunter and a good fellow, spending most of his time in the hills, either with tourists or alone. The camp was composed of a large tent and several smaller ones, ideally situated in a clump of pines. It was afterward abandoned because of forest fires.

At 5 p. m. I decided to look up a buck, so a guide saddled horses and we set out. We did not go more than 2 miles from camp, but in the course of the circuit saw 13 deer, 4 of which were bucks. I shot at 3 of those but missed every time. I suppose I had buck fever. It took me 3 days to recover entirely, but when I did I found it easy to get game. Deer are more abundant there than rabbits in Missouri. I was with Goff 2 months, but after killing one deer I confined myself to grouse, which abounded. I loafed a good deal, too, until the time came to hunt with dogs.

A number of sportsmen visited the camp between September 1 and October 15, and with one exception each carried out a fine pair of antlers.

On October 11 came a party of 5, 2 from Kansas City, the others from Colorado Springs. They came to hunt with the dogs, but, arriving a few days before the deer season closed, they went for their share of venison. They jumped 4 bucks together and got the whole band, after which they killed no more deer.

A mile from camp was a deer crossing. After the first snow, when they began to leave for lower levels, great numbers passed there. I believe fully 5,000 crossed at that place.

During September, because the drought preventing the use of dogs in bear hunting, Goff kept traps set. On the 23d he came into camp and announced that he had a bear fast in one of his traps. All was excitement at once. I had been promised the first bear. Saddling hurriedly we went to the scene of action, taking the dogs for exercise and to give them a square meal after the skinning. Our captive proved a grizzly. He was fast in a 5 pound trap, to which was chained a 5 inch log 5 feet long.

Football is rough sport, but it isn't a circumstance to what we saw there. The dogs had had experience, and attacked cautiously from the rear. One feinted from the front to engage the enemy's attention, while the others made a rush. Bruin would swat with right and left swings, but his agile foes always side-stepped in time. At last Turk, the bloodhound, ventured a little too close and was nabbed by the neck; and although he had a mouthful of the bear's forehead in his jaws he would have fared badly had not the others made a gallant diversion in his favor.

The attack was so fierce that old Ephraim was compelled to drop Turk and turn on his more troublesome foes. It was some time before I found a chance to shoot without danger of killing a dog or 2, but at last it came and I planted a shot from the 30-40 Winchester, which fixed the bear. The skin is a fine one, being almost white across the shoulders.

We reset the trap, and 3 days afterward we found a fine cinnamon in it. We did not take the dogs then; just went out and shot him.

October 16 we had a deep snow, and early the 17th we set out with the dogs. Of these, 5 are foxhounds, for trailing, 2 are Siberian bloodhounds, and 3 are a cross between bull and shepherd. These last do the fighting.

It was a good day for tracking, and we soon put a lion up a tree. He was shot at once and fell so badly wounded that he put up a very weak fight. Later in the day we got a lynx. The next day we added another lynx to our list. These animals are difficult game. They live high in the mountains and leave a trail so nearly scentless as to be extremely hard to follow, except through snow. When the snow begins falling it is soon so deep as to drive the hunter to lower altitudes.

On the 19th it snowed all day. The next day trailing was fine, but we struck nothing until nearly dark, when we put up a lion on a hill. When we reached him we could only make out a dark spot in the top of the tree. Rifle sights were invisible, so we just pointed the barrels of 2 of our guns at him and fired. The lion snarled and climbed higher. A second round brought him down. The dogs at once bounced him and we had a lively shindy for a spell, but it was soon over. He was not skinned until the next morning.

On the 21st one of the guides led a Kansas City man in another direction. They were gone 2 days, and came in bringing the pelts of a lion and a bobcat. This made a record in 6 days of 3 lions, 2 lynxes and one bobcat.

On the 23d all visitors left but me, and as I intended going with Goff to his bear and lion camp, we moved the outfit to his ranch, to allow the horses and dogs to rest before starting for the lower country. We were joined by some new sportsmen, and November 4 we set out with 2 wagons loaded with duffle, and 6 tourists on horseback.

By 2 p. m. of the 24th we reached Rangely, where we found a band of Utes, who had been hunting but had been turned back to their reservation by the warden. They had stopped at Rangely for a few horse races. We watched the races with interest. The first was between a horse belonging to Moc Face and another was the property of a Mexican.

Each horse wore a bridle and a rope tied about his body back of the shoulders. The Indian rider was the best I ever saw. The course was over a long, straight road. The jockeying done at starting would have driven an Eastern jockey crazy. While trying to get a start the Indians ran about vociferating, "Bet 'em on Injun hoss, all same." The riders finally got off, and the way they rode was the sight of a lifetime. The Indian came in first, hailed by the shouts of his people. The Mexicans were silent. Two other races followed, the Indian winning both. Then the tribe started for the reservation, but persisted in wondering why the white man could kill deer 6 weeks and the Injun only 6 days.

The red men were curious to know what we should do with the dogs. When told that we should hunt bears and lions, a pompous old fellow remarked, "Maybe so you ketch 'em; maybe so you no ketch 'em." They are so superstitious about bears that they will not hunt them, but, meeting one, will try to kill it. The next morning we left Rangely, and in the evening made camp on West fork of Douglas creek, 30 miles from Rangely. Everything was dry; dust 2 inches deep, which was discouraging to hunters. The dogs became hungry for a chase, and by the second day's hunting all but old Jim started off on a wolf's track. Goff followed to call them off. A gray wolf can do a whole lot of damage to a pack of dogs. He runs on until the pack strings out. Then he turns and finishes the leader; then runs on until he can serve the second, and then the others the same way. After 3 hours Goff got the dogs off the trail.

Another morning we found a lion track. The dogs worked on that trail 6½ hours to put the lion up. He had traveled over bare rocks, and the scent a lion leaves in such a place is so faint as to be nearly untraceable.

While we were on Douglas no rain fell, yet we caught 6 lions and one bobcat. I think we went down too late for bears. We saw no fresh tracks while we were there, but cattlemen say there are many bears.

The White river country is a paradise for hunters.. Goff wanted me to go to the ranch and hunt with him, but I credited myself with enough sport for one year and declined.

A MINNESOTA MUSKALONGE.

O. L. THOMAS

It may interest some of our sportsmen friends to know that there is still a place where muskalonge, the great "Wolf of the Waters," abound, and are still untutored to the point where they avoid the lure.

July 28, last, my brother Clark and I left our home at State Line, Wisconsin, with a determination to find some good muskalonge fishing. On our arrival at Deer River, Minn, we procured a birch-bark canoe and camping outfit and at once began our tour of exploration up Deer river toward the lake-dotted region of Itasca county. We scrutinized most of the head waters of the Mississippi river, all of which have muskalonge in them, and passed over the divide into the waters of the Red river, through the Cass Lake Indian Reservation, the Winnibigoshish Reservation, the Chippewa and Leech Lake Reservations. We found many beautiful lakes, with water clear as crystal. Most of them, the Red river waters as well as the Mississippi, are alive with pickerel and pike. In some of the lakes we had the finest black bass fishing I ever saw, the fish being all of the green variety. In Turtle lake, a beautiful sheet of water, 5 miles long, we could have loaded our canoe any day with bass and we used no bait but a spoon. Those were the most beautiful green bass I ever saw. They bore no relation to the razor-back variety, but were extremely plump. They averaged 4 pounds, and several that we caught weighed 6 pounds.

We spent 2 days there, but having no use for more than 2 or 3 fish a day except to turn them back into the water, it soon grew monotonous. It was too easy; besides, they were not muskalonge; so we went on, passing scores of beautiful lakes and much inspiring scenery.

Many moose crossed our path, all about 2 minutes ahead of us. The nearest we came to seeing one was eating a piece of his steak at a friendly homesteader's shack on the bank of a stream. We saw many deer, but did them no more harm than to frighten them from among the lily pads, their choicest food, by our war-whoops, rejoicing to see them prance away, switching their tails in farewell as they scudded into the bushes. There, knowing they were secure, they would snort and, in apparent mockery, give us the laugh. On one occasion, a huge black bear stopped on the bank long enough to give us an inquisitive glance. Luckily for him we had nothing but a shot gun, with light shot.

As the days and weeks passed, our tour seemed too uneventful. We had only caught 2 muskalonge and those in the Mississippi river. Our 60 days passed and we pulled up at Walker, a small town on the shore of Leech lake, for a day's rest. When we expressed our discouragement to the man at the Walker Boat Livery, he said,

"Why don't you go down on the Elbow Lake chain and catch some sand trout? It is great sport."

"Sand trout" was a new name to us, so we asked a description, and finally concluded they must be muskalonge. At any rate, we wished to see what it was that "breaks up everyone's tackle and in some instances weighs 40 or 50 pounds."

We started by train early the next morning, October 2, for Dorset, launched our canoe in Elbow lake about 9 o'clock and started trolling. In less than 30 minutes there came a vicious tug at our line and the light steel rod bent double. Both of us being anxious to set eyes on a "sand trout" for the first time, we turned our gaze in the direction of the hook. Our line was at a high tension and rising gently toward the surface, when an immense fish vaulted out of the water his full length, gnashing his teeth and shaking his ponderous jaws with a mighty effort to rid himself of the hook. Alas, he was successful! The hook fell into the water several feet to the left. This conduct we knew only too well; and as he had exposed his silvery side to our full gaze and had dived back into the water with an awful splash, we both shouted in one voice, "A muskalonge!"

Then followed great sport. This experience was repeated at surprisingly short intervals till, at one o'clock, we landed for lunch with one 10-pounder; but we had thrown 7 back into the water unhurt, only keeping them long enough to gently take the hook from their mouths. The largest one weighed 25½ pounds.

After lunch we started to investigate the chain, which consists of 13 lakes. All are clear as crystal, with sand bottoms and many beautiful sand beaches, and surrounded by lofty, rolling hills, covered with a massive growth of pines.

It took 2½ days to go through the chain. During that time we simply dragged our spoon behind the canoe and we caught in all 29 muskalonge, the 25½ pounder being the largest. Of those we kept only 2, which we ate, releasing the others.

About 3 o'clock one afternoon we passed a boat with 2 occupants fishing and to our inquiry regarding their luck they said,

"They are not biting much to-day, we have only caught 10 so far."

Those lakes possess many peculiarities. There are no fish in their waters except muskalonge and perch, notwithstanding the fact that the chain is surrounded by many lakes full of bass, pike and pickerel. Another peculiarity, to me the greatest, is that the chain is all connected and flows into Elbow lake, which has no visible outlet.

I know some of my statements here will meet with doubt, criticism and be called "fishy"; but I only ask that those who doubt will visit those lakes. A few days of this royal sport will convince them of the truth of my story; and if it does not cure the most ardent angler of any case of muskalonge fever, at least temporarily, I will report him at once to RECREATION where he will get what he deserves.

Barber—"Your hair will be gray if it keeps on."

Scantylocks—"Well, I hope it will keep on."—Baltimore World.

HE STACKED THE CARDS ON THEM.

DR. WILLIAM A. MANN.

During the summer of '99, 2 of my nephews and myself were spending our vacation at Spring Lake, Mich., and were putting in time trying to lure the numerous fish from their places of retirement, but without much success. However, we had caught a few, even if the big ones were known by those familiar household names of dog and cat; and that was more than 2 young men who were there from Chicago could say. They had fished and fished and hadn't even caught a sucker; but they caught several of them later. Bradley Anderson was the name of one of those gentlemen, though we called him Bradley Martin.

Brad was tall and lean and awkward, also extremely bashful; but he had a little of the old boy in him and was always playing jokes on his companion, John Marshall, who was good humored and accepted the position of being made fun of. Sometimes he included more of us than Marshall.

One afternoon it had sprinkled a little, so we did not go out in boats to fish, but confined ourselves to still-fishing from the dock. George and Willie, my 2 nephews, and I caught a white, or silver, bass, besides some crappies and blue gills; and we decided to try fishing after dark, with a lantern hung on the side of the dock, just over the water.

After supper, by urging, we got Brad and Marshall to join us. We caught a few crappies at first. Then Brad got a 20 foot reed casting pole and declared he was going to catch more fish than anybody else, or even than all of us put together. A yacht was tied to the dock and Brad climbed out on her and sat astride the boom, remarking, "I am going to charm those fish. My toes are crossed, my legs are crossed, my arms are crossed, my fingers are crossed, and now I am going to cross my eyes. When I get a bite, look out there on the dock, for I will fling that fish half way up to the house."

After a few minutes of silence, Brad gave a war whoop, uncrossed himself, and grabbed his pole, which had been stuck under his arm.

"I've got him! Look out there!"

There was a gleam of silver in the air and a dull sound back of us proved his charms had worked.

"Here, Gray, take him off and bait up."

Gray was another one of the boys and was not fishing, but was around offering us all a little advice. Gray did as requested, we supposed, but it was so dark we could not tell what he did. We had no lantern but the one down by the water, and we were glad to keep that away from us, for mosquitoes seem to like to dine by a light. As Brad was getting ready for more charming, several of the small boys and one or 2 larger ones moved over in his district to try their luck, but luck was against them, and in a few moments Brad had another fish, which was landed in the same vigorous way as the first.

To make a long story short, Brad, by numerous changes in charms and additional crosses, counted his fish up to 12 and then decided he would quit, as 13 was an unlucky number. Gray was told to gather up the fish and take them to the cook, so they could be cleaned and cooked for breakfast.

During the whole evening the rest of us, 4 or 5, had caught only 2 small crappies and one silver bass. We felt rather sore that Brad had outdone us so, in spite of the fact that some of the others had fished in his hole also.

A little later, we quit and began to pick up our fish. George suddenly said, "Look! Here is a fish with its head mashed."

"Yes," said Brad, "I stepped on that one of yours when it was lying on the dock."

His explanation was accepted, and we went to the house and gave our fish in to be cleaned. We had fish for breakfast, but we missed several of our largest ones, and wondered where they were. Brad also had a large fish served, but it was untasted.

It came out later that Brad had taken out one of our fish, had hooked it well, had then thrown it in the lake and pulled it out as a catch, repeating the operation 11 times; but as the head became smashed, he had landed it more gently.

As a practical joker, Brad was a success, even if he could not catch fish. When you are in Chicago step into Brad's office and ask him to show you his position of crosses when he wants to catch fish.

"Papa, what's the difference between an amateur and a professional politician?"
"Oh, 2,000 to 20,000 a year."—Life.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman.

GAME WARDEN ROASTS THE SIDE HUNTERS.

RECREATION has an editorial article in a recent number reflecting severely on certain sportsmen who were prominent in the Charlemont and Conway side hunts. The magazine calls these men hard names, and compares game hunting where the gunners line up on different sides, to prize fights. It says, "It is strange that the decent sportsmen of Massachusetts and one or 2 other New England States in which these barbarous slaughtering matches are still carried on, do not secure the passage of laws to prohibit them."

This Charlemont man says he is going to have some fun with the editor of RECREATION.—Greenfield, Mass., Gazette and Courier.

No, I did not reflect on any sportsmen, for there were none in the side hunt. Sportsmen never engage in these brutal pastimes. I did criticise the game butchers who participated in that hunt, but did not give them half the roasting they deserve, because I could not spare space enough; but whenever that Charlemont butcher gets ready to have fun with me, I shall be glad to give him all he wants of it.

EDITOR.

The following letter, which appeared in a recent issue of the Greenfield, Mass., Gazette and Courier, shows what true sportsmen think of the Charlemont and Conway gang:

The article entitled "A Herd of Side Hunters," in December RECREATION, and your reference to it in the last issue of the Gazette and Courier, are interesting. RECREATION calls the Charlemont and Conway side hunters "game hogs" and you call them "sportsmen." While the title applied to these hunters by RECREATION may sound harsh, these side hunts can not be too strongly condemned. The hunters taking part in them are not sportsmen. The explanation of the Charlemont hunter who says, "The result of these side hunts is that less game is destroyed than would otherwise be the case, as when all the hunters start out they soon frighten the game into inaccessible places," offers a unique method of protecting game. Choose sides, all take guns and start for the woods, to protect the game. The scores something over 70,000 on one side alone, indicate, slaughter rather than fright or protection. If the object of these men was to protect the grey squirrels, as the Charlemont hunter says, by killing red squirrels, which he says prey on the greys, why did they not have reds count more than greys, and thus induce the hunters to shoot reds instead of greys? On the contrary, they had reds and chipmunks count low, while grey squirrels and ruffed grouse counted high. The result was a slaughtering match of which the participants should be ashamed. The real sportsmen of the State have worked long and earnestly to protect the game that is killed on these side hunts. Sportsmen stock our streams with trout, put out English and Chinese pheasants, Belgian hares, etc., for the good of the public, and it must be discouraging to them to see the game they try so hard to protect killed by side hunters just because it counts so much a head.

E. C. Hall,
Deputy Game Warden, Buckland, Mass.

Further condemnation of the Charlemont and Conway side hunters is expressed in the following letter which is reprinted from a recent issue of the Greenfield, Mass., Gazette and Courier:

In your last issue I noticed an article on the Charlemont and Conway game hunts, saying that G. O. Shields, editor of RECREATION, called the men prominent in this affair hard names. In my opinion, and in that of hundreds of real sportsmen, the condemnation was just, provided the reports of these side hunts are true. It has been reported on good authority that in these hunts a quantity of game was killed before the counting-up day and allowed to rot. Another feature of the hunts has been the stealing of game from one party by another.

In the article referred to in your paper, a Charlemont man tries to defend these men by saying they frighten the game and drive it to remote and inaccessible places. The chances are that when 40 or 50 men go out in the woods, one party will scare the game right where another party is waiting for it, and wholesale slaughter is the result.

Your correspondent says the men go out for a few days and get all the shooting they want for the season. On the contrary, many go out during these hunts who would never go any other time. All the crack shots are out vieing with one another to see who can bring in the biggest bag. Then the large parties literally hem in the game, making it next to impossible for it to escape. He further defends his friends by saying they kill the red squirrels, which prey on the grey ones, and that the hunters thereby do the grey squirrels a kindness. The lameness of this defense is apparent to any sportsman. While it is not denied that the red squirrels harass the grey ones, it is well known hat if the greys are given a chance they get along all right, even though they do lead a somewhat strenuous life.

Mr. Shields, through his magazine, RECREATION, is making a big fight against those whom he rightly calls "game hogs" and "fish hogs." He is doing a grand work in arousing true sporstmen to the fact that our game laws are in many cases inadequate and poorly enforced. In several States his efforts have been instrumental in having wise protective game laws passed, and their provisions better enforced. Although he roasts the offenders who come to his notice severely, he is no respecter of persons. It is all the same whether it is a half-breed trapper or a sheriff, or a superior court judge who is on the rack. In this work he has the support and good wishes of thousands of sportsmen who are clean, who want restrictive game laws and want them enforced.

Game hunts conducted as they are in most cases are wanton and barbarous slaughter. Efforts are being made to make them illegal and punishable by a heavy fine in this and the few other States where they are yet countenanced.

Your Charlemont man says he intends to have some fun with Mr. Shields. Just what fun he will get out of posing as an injured member of a party of side hunters is difficult to see.

Sportsman.

MOUNTAIN LIONS IN MEXICO.

El Paso, Texas.

Editor RECREATION:

Last season was an excellent one for El Paso sportsmen. As you know, we are within reach of the famous Sierra Madre game fields along the line of the Rio Grande and Sierra Madre Railroad, and General Manager Ramsey, together with his polite and obliging traffic manager, Mr. Halmon, see to it that their line extends to sportsmen going into Mexico every courtesy possible.

The first day of last October, 4 of us

boarded the train here with our rifles and other paraphernalia, and at Casos Grandes, the present terminus of the railroad, we secured saddle ponies, 4 pack mules, a guide and a Mexican servant. After 4 days' travel we camped on the Goviland, a headwater stream of the Yaqui River, amid scenery rivalling anything on the continent. There we found game in abundance: deer, turkeys, pigeons, squirrels and parrots; while the deep black pools swarmed with trout. We followed down the stream, which runs, or rather rushes and roars, over a rocky bed at the bottom of a canyon 1,000 feet deep, and finally made camp at a beautiful spot where we hunted, fished, bathed and enjoyed ourselves generally; a good 100 miles from any human habitation, we, perhaps, being the first white men who ever visited that section.

Lion tracks were thick, and once, when riding down the canyon, 4 big fellows climbed up on a bluff and looked at us. One of the boys got in a shot and wounded a lion, but, as we had no dogs, he got away. The next day I shot 4 turkeys out of a big drove and laying down my rifle, I took the birds to a creek to dress them. Suddenly I looked up, and there stood a big lion sniffing the blood, and between me and my rifle. I instantly remembered that I had left my 6-shooter in camp. For about half a minute we eyed each other, while I thought what a pose for a camera! Then his lionine majesty showed signs of restlessness. His magnificent tail undulated from side to side, and I thought I should have to try him with my knife; but when I shied a rock at him, he trotted leisurely away and I saw him no more. I carried my 6-shooter thereafter.

We explored and photographed several cliff house ruins, from which we secured a number of relics. Finally we decided that the game was too gentle to afford much sport, and after spending 4 days in that spot, we packed up and started on the return journey. We only shot bucks, and on the return trip we "passed them all up" as well as several droves of turkeys that we saw; but one of the boys could not resist the temptation to amuse himself by shying small pebbles at a bunch. Having only rifles, we did not shoot any pigeons or squirrels, but I shot a poll parrot with my 6-shooter.

Near one camp there was evidence of recent Indian occupation and we moved out, much to the disgust of the guide, who, being an old Indian fighter, declared we could whip 100. A small band of renegade Apaches have their rendezvous in an accessible canyon not far from where we were, and about a year ago they raided a Mormon settlement. No white man has ever been in the canyon, which is 25 miles long and 3 to 10 wide, with walls 3,000 feet high, rendering it inaccessible to all except Indians who know a secret trail. A young Temache Indian declares he knows the trail, and says he will guide us into it, and it is my intention to explore the place next October, when I expect to find archeological treasures galore, to say nothing of plenty of game and, perhaps, a few Indians for variety. All that section, for hundreds of miles, is absolutely uninhabited, and is extremely broken and picturesque. The canyons are deep, and through each flows a stream of pure water. The mountains are flat topped and covered with pine and a luxuriant crop of grass, thus forming the finest country for camping to be found anywhere; a place where man can commune with nature to his heart's content, and forget that there is such a thing as a city with its eternal rush for money.

I. J. Bush, M.D.

HUNTING FRANCOLINS IN BURMA.

Yenangyanng, Upper Burma, India.

Editor RECREATION:

It was a damp morning and the clouds were banking in the East, whence the rain at that time of the year came. As there was no prospect of the day being fine enough for outdoor work, I decided to take my old 12-bore and try to get a shot at the francolins.

The variety that abounds here, C. F., is found only within the dry zone in Burma, and never West of the Irrawaddy river, except near its bank. The Southern limit of the distribution of this bird is well defined. It frequents dry, open forest and scrub jungle, and seems to prefer hilly or undulating ground to the plains. Their cheery call of "whack, whack, whacker," could be heard from every hillock, and it was not long before I found birds calling close to me. Hitherto, I had met these birds in the forest reserves where I was engaged in surveying, and had them beaten out; but this time I was unaccompanied by even a native attendant.

Thinking I could get him to rise, I ran up to the bush in which I heard him call, but though I jumped on it, I could not find him. Recalling the fact that I had come up hill toward him, and thinking that he had spied me, I determined to get up behind the next bird and come down on him. Whick, whack, whacker; there was a call just on my right, and behind the crest of the hillock. Carefully climbing up to the top, I gained the summit and whirr-r went a black and brown body curving away from me, falling head first at 30 yards to my right barrel.

I picked him up, tied him to my belt and went on.

The next time, I noticed a brown bird drop from a tree stump behind which the francolin was calling, and not for a moment thinking that my bird, as I fondly styled him in anticipation, had spied me first, I advanced, only to find a deserted nest. The little beggar was calling on the stump, and had been watching me all the time, and dropping quietly to the ground, had run down into the ravine below, where, with his lady love, he probably chuckled over the way he had done the clumsy biped.

During the morning many blue rock pigeons flew by me, but I let them pass, as I was after the shy little francolin.

I got only one bird, but I gained experience, and never again will I walk up to a bush whence the merry call proceeds without satisfying myself that the cunning little francolin does not notice my approach until it is too late to hide. Then its only alternative is to get up with the whir-r that is as music to a sportsman's ear.

H. T. Davies.

KEEP AN EYE ON BROWN.

Hollidaysburg, Pa.

Editor Recreation:

Yours received, enclosing a letter from A. O. Brown, of Frugality, Pa., in which he denies having violated the game laws. I have no positive proof as to his guilt, but that he is a gross violator of those laws I have not the least doubt. My attention has so often been called to his acts of lawlessness within the past year that I decided to write to you, so you could investigate the matter.

A friend, who resides in Frugality, and on whose word I can always rely, first told me about Brown, and urged me to report him to you. My friend boards at Brown's hotel, and says Brown repeatedly served his guests with game, especially grouse, both in the close and open season last year; that he often shot grouse in the nesting season, and openly boasted of killing more than 10 birds in one day. I do not give my friend's name, lest it should result in his having to leave Brown's hotel, which is the only one in the town. A Hollidaysburg sportsman spent 2 weeks last fall hunting around Frugality. When he returned he told me Brown was the worst game butcher in Cambria county, and that his lawlessness was the talk of the town in which he lived.

A short time after writing you about Mr. Brown I received a reply, saying you had written him. My friend came here a few days after on a short visit and said Brown suddenly stopped hunting and serving game to his guests, and appeared much worried about something. You wrote Brown last fall, and it seems queer that he should answer at this late date. Perhaps you wrote again. The tone of his letter does not seem to show any indignation on his part, and I think if he was falsely accused he would have answered with more spirit and promptness. I think it would be well to have the L. A. S. warden of Cambria county do a little detective work at Frugality. It would no doubt show Brown up in his true light, and others also.

In that county, especially in the vicinity of Frugality, little respect is shown for the game laws. It is a rough, coal-mining country, and the majority of the people are foreigners, with no respect for any laws. Sunday is the great hunting day there. Then the woods swarm with pot hunters, who seek to kill everything in sight, from a bear to the smallest song bird. Few of the people know anything about game laws, and they hunt any time they wish, even in the summer, when many grouse are shot on the nest. The warden of that county has plenty of work before him, and it is to be hoped he will get down to it in earnest.

Last fall Mr. William Gardener and I, both members of the League, tried to have the constables of this (Blair) county urged to do their duty, under a new law which requires them to act as fire and game wardens. They have since been instructed by the judge of the county to attend to those duties.

H. P. D.

It is true Brown did not answer my first letter, and I jacked him up again, as H. P. D. suggests. One can read between the lines of his statement to this effect: "I am not guilty, but will never do it again if you let me off this time."—Editor.

MORE OREGON HOGS.

I hand you herewith a clipping from the *Rustler*, of Lakeview, Ore., by which you see we have some swine in Oregon. The good work of Recreation is fast changing the sentiment of our people, but here are some rooters that deserve branding.

A. V. Oliver, La Grande, Ore.

A camping party consisting of Mr. and Mrs. W. D. Woodcock, their son, Jack, and daughters, Maud and Jessie, Fred Ahlstrom and Andrew Hammersley, returned from Honey Creek Saturday. They report having had a splendid time. The men claimed to have bagged 3 deer and 18 antelope. Mr. Woodcock made the largest kill, having 3 deer and 8 antelope to his credit, while Fred Ahlstrom and Jack Woodcock got one antelope each and Andy Hammersley 8. So far this has been the most successful camping party yet in the way of bagging game and fish.

I wrote Woodcock and Hammersley for their version of the story, and the latter answers as follows:

Your letter of the 7th inquiring as to my having killed 8 antelope is at hand. I anticipate you have a roast in store for me, but being like the father of his country I must plead guilty. When one has been housed up in a store for a year and then gets out for a week's hunt, goes 50 miles out on the desert, drinks alkali water, etc., he wants to bring enough game in to treat his friends. Antelope were plentiful out there, and I could not resist the temptation of killing a few to bring to town, knowing it would be a year or more before I would get another chance. Doubtless when you read this you will say it is fortunate that men like me don't get out often. I have read RECREATION many times and have always thought your efforts to stop the wholesale slaughter of game were laudable, but I am, I fear, a little like the parents who always think other people's children are bad.

Now be charitable with me and do not give it to me too hard.

A. H. Hammersley, Lakeview Ore.

ANSWER.

You might with the same propriety say: "I am fond of horse stealing, but have been in jail a year past and have had no chance to indulge in my favorite pastime. Last week I got out. I went on the plains and found a big herd of horses. I had to sleep on the ground and drink alkali water. Besides, I knew I should not get another chance to steal a horse for at least a year, and as these were not branded I ran off enough for all my pals. I hope the sheriff won't get me, or that if he does the judge will be lenient with me."

Would you not consider that a mighty flimsy plea for a man to put up? Well, it would be just as reasonable and just as manly as yours. In my judgment a real, avowed horse thief is a gentleman as compared with you.

Woodcock has not replied to my inquiry, and so I infer he is guilty, as stated in the clipping. If so, he is disgracing one of our noblest game birds by using its name. He should change his cognomen to Skunk. —EDITOR.

WITH THE SHORE BIRDS.

Taunton, Mass.

Editor RECREATION:

That racket meant that it was 3:30 A. M. Fifteen minutes later I appeared at the door ready for a morning's shooting. The stars were shining through a few scudding clouds and the moon was just setting.

Arriving at the blind I put out the decoys and settled myself to wait for daylight. Finally I was able to discern the sand dunes looming up across the pond. "Ple—wheu—wa!" I heard the note of the golden plover, and crouching down I tried to call them in. After a minute or 2 I saw 3 small objects approaching. As they hovered over the decoys I fired and knocked down 2; the third left the marsh in the direction of the sand dunes. Scarcely had I picked up my birds when I heard a big yellowleg calling in the distance, and a flock of 9 came in answer to my call. I killed one with the right barrel and 2 with the left. After repeated calling I coaxed 4 more back within gunshot, killing 2. A few minutes later, with a swish of wings, 5 black ducks flew past, and as they were protected by the law at that season I let them go. Then noticing in a flock of peep a bird somewhat larger than the rest, and being something of a naturalist, I shot it. It proved a good specimen of the rare Baird's sandpiper, and the third that has been taken in this State. It now graces the collection of a friend. So the morning passed with an occasional shot at a big yellowleg or plover, until the sun rose high and the flight ceased. Then, with great reluctance, I gathered in my decoys. No sooner had I got them all in my basket than I heard the note of a curlew, and, looking up, saw a large flock flying over out of gun shot. That was hard, since they were the only curlew I saw that day.

On my way across the fields I shot an upland plover, which alighted in a bunch of grass in front of me. Farther on I flushed a covey of quails, which scattered in the brush, and although I could not shoot them at that season I wished I had my old dog along just to see him work.

Then, with that appetite which is the especial reward of the early riser, I presented myself at the house. W. R. D.

OUR DUCK.

One day last spring my chum, Pete, and I went duck shooting. I carried a double barrel, loaded with No. 4's. Pete's gun was charged with 7's.

Passing a puddle in a cornfield, we flushed 4 mallards out of range. Later, as we were returning past the same puddle, 2 more flew out, and we marked them down ¼ of a mile away. Again we flushed them without getting a shot. That time we saw them settle in the distance near a grove of swamp willows. We circled and came up under cover of the grove. At length, after a wet passage through the swamp we saw the mallards in a puddle just 60 paces distant.

They were close together, and as that was before I began to read RECREATION we decided to shoot them on the ground. With my heavy shot I felt sure of killing them, so I told Pete we would both shoot at once and divide the ducks. The 2 reports blended into one, and over the heavy cloud of smoke we saw one duck starting for the

North Pole; the other lay feebly flapping one wing.

"We got one duck!" cried Pete, not thinking of his light shot. As we expected the other duck would return we reloaded the guns and sat still under cover. Soon we saw him. He circled several times, but always out of range, and finally flew away.

"We would better see about the one we have," I said. Before we got within 20 yards of her she, too, started for distant parts. We gave her a parting salute of 4 shots, but failed to stop her mad flight. Pete looked at me and said, "We hain't got no duck." "So I see," said I. Going home we swore that if we ever wounded another duck, we would keep on wounding it while a feather moved.

B. B., Little Sandusky, O.

NO, MEADOW LARKS ARE NOT GAME.

That charming story of "A Boy and a Grouse," in December Recreation, reminds me of a certain December afternoon when I sallied forth determined to get a grouse or die in the attempt. The woods were thick, and I was walking along a narrow path with high shrubs and evergreens on each side. Suddenly there was a startling whir-r, and a streak of feathered lightning crossed the path just ahead of me. It was a difficult shot for an expert, to say nothing about a novice, as the bird was visible only an instant. I didn't have time to bring the gun to my shoulder. but blazed away with the butt against my biceps, as I had no difficulty in remembering for several days afterward. The feathers flew, and I rushed into the bushes confident the bird had dropped; but search as I would, I could not find it, and finally gave up discouraged I walked on about 200 yards, and was standing on a side hill when I saw something fluttering 25 yards away. It was my grouse, beating the air with his wings in a last effort to rise. He had flown as far as he could after being shot and then dropped to earth to die.

I saw a lone meadow lark in some corn stubble last winter, notwithstanding we had had 3 weeks of snow and cold weather. Meadow larks were plentiful here last fall; I saw one flock of at least 200. I think there should be an open season on these unquestionably game birds. Make it short and late, if necessary, but where they are so plentiful and other game is scarce give us a chance at them. They are larger and more difficult of approach late in the season than any of our game birds.

Arthur L. Owen, Cortland, N. Y.

CRITICIZES THE CLUBS.

In the earlier days of California a few rich men got the Legislature to pass a bill allowing the sale of swamp lands belonging to the State, at a nominal price. Then by procuring fraudulent applications the capitalists obtained possession of great tracts of overflowed lands. As a result a few men and shooting clubs control all the water fowl shooting in California.

For their further protection these clubs have joined to have another law passed, and it has already advanced to a third reading. It is an infamous piece of class legislation, and if it becomes a law will convert the State into a game preserve for the exclusive benefit of a small class of wealthy sportsmen. Wild game belongs to the people generally, but under this bill only those controlling the game marshes are to be privileged to shoot over them. It prohibits the sale of all kinds of game. Market dealers can not offer it for sale without committing a misdemeanor. All game of any value is to be reserved hereafter for the sportsmen's clubs and their wealthy friends, and no one else is to have any.

Under existing laws game of all kinds has been well protected; whatever benefit was to be reaped from an abundance of game the public have shared in equally. Now all is to be changed if the bill passed in the Senate becomes a law. Poaching will be encouraged. Jurisdiction over wild game is to be taken from the Fish and Game Commission, and the State is to provide game keepers for the clubs at its own expense, through the creation of a Game Commissioner who will have power to appoint an endless number of deputies.

I can not afford to be a club member, though I am fond of hunting, yet I have been unable for years to find a place to shoot a duck without being ordered off as a trespasser. The clubs have got the earth; now they want the State to pay to protect their game.

W. G. Hall, San Francisco, Cal.

THE GUIDE SYSTEM.

I am bitterly opposed to the guide system and to big advertised hunts, even for so-called varmints. Both create a desire to kill and to be classed with men who have more money than sportsmanship. Without wishing to hit President Roosevelt in particular, the reduction of cougars in Colorado will result in raising the bounty on coyotes in that section. Make a specialty of coyotes on a well advertised hunt and some good will be done.

I have a fair knowledge of so-called guides, having lived with them, hired them, and as often fired them. Have known them to drive game away from each other for days, until the sucker or suckers employing them agree to pay so much a shot at deer, so much at bear, etc. Then the slaughter begins.

Not that there are no good men in the business, nor that it is not often necessary to hire them, with their outfits; but as a rule they are a shiftless, low-down set of law breakers, and unless there are women along, a party that needs a guide needs a nurse as well.

In our 9 months trip from Fort Wrangle to Dawson, 4 months dragging a sled, we found out the true worth of this class of people. They invariably were in the rear and the first to lie down. I have even seen them crying. A little worse than the white guide is the Indian. If the little bird does not whisper just right to him you are out a guide. To see the sloppy praise and the mixture of patronage, fawning and write-ups these hired game destroyers come in for is sickening.

Geo. F. Wright, Chicago, Ill.

DECLINED WITHOUT THANKS.

I have yours asking whether the report that I had killed 125 wild ducks in one day is correct. I would say in reply that it is correct. The date was November 6th. Among the ducks shot were 25 canvas backs and 30 red heads. November 11th I killed 138 ducks. This is not an unusual day's bag when the conditions are favorable; I have often done better. I had good shooting, however, the morning of the 11th, when I had picked up at sunrise 43 ducks. How would you like a descriptive article with 2 or 3 sketches representing duck shooting on the Susquehanna flats? I do considerable special work, and should be pleased to have you advise me if such an article would be desired by you, and what you would be willing to pay for, say, 2,500 words with the sketches.

W. T. Jackson, Havre de Grace, Md.

ANSWER.

You say it is not an unusual day's bag, and that you have done even better. It would be unusual, and even impossible, for any decent sportsman, for all such men quit when they have enough, even though birds may still be flying thick. However, for a confirmed game hog, as you are by your own confession, such things are possible. As I have before had occasion to say, it is a pity that all States do not enact laws that would send such men as you to prison for 6 months for each of such offences as you say you have committed.

No, I do not want any such stories of slaughter as you offer to write for me, and no decent journal would print such, even if you would furnish them free of charge. —EDITOR.

THE OUTLOOK IN OHIO.

The weather conditions during the whole of the last open season were extremely unfavorable for successful hunting, being a succession of cold, dry winds. The performances of even the most reliable field dogs were disappointing, and our sportsmen were thus deprived of the most enjoyable feature of quail shooting. There was a more abundant supply of birds than this part of the State has known for years, and thousands are left over in this county for another season. That is, providing they escape the pot-shooting rabbit hunters whose opportunity arrives with deep snows and freezing weather.

Fox squirrels are increasing, and another year or 2 of immunity, such as they enjoyed during the last 2 years will make squirrel shooting again possible in this section.

Our ruffed grouse have been exterminated, and a few of us are trying hard to introduce the ringneck pheasant, though it must be admitted our efforts hitherto have been fruitless.

We hope the humiliating jumble known as the Ohio game laws will be revised at the coming session of the Legislature, along lines of rational protection and common sense. Oh, for protection that will protect and wardens that will ward!

L. A. S., 6015, Urbana, Ohio.

A PITIFUL SLAUGHTER.

Enclosed find clipping from the Murfreesboro, Tenn., Banner. No words are strong enough to sufficiently condemn such slaughter as this.

T. H. Doods, Petoskey, Mich.

The item to which Mr. Dodds refers is as follows:

> Thousands of robins are being brought daily to Murfreesboro. These birds are caught at night in the extensive cedar forests near Murfreesboro. At this season of the year they flock to these parts in countless thousands to feed on the berries of the cedar, of which they are exceedingly fond. At night they congregate in certain groves by tens of thousands, and there the sportsmen with the bag, but gunless, capture them. Parties are made up nightly and go out from town to these roosts, and in most instances report remarkable catches.
>
> Four gentlemen from here recently caught 360 birds, and they stated that there were quite 200 persons operating in the same forest, most of whom were successful in catching 2 or 3 messes of birds, and some individuals as many as 150. These birds sell on the market for about 7½ cents a dozen, but so abundant is the supply that dealers find it profitable to ship them.
>
> There are persons who make a business of catching these birds for the market, and they make fair wages One man can make an average catch of 4 or 5 dozen a night. All the returns from the sales are net profits. as the method of hunting requires no outlay in the matter of ammunition or otherwise, and the work or rather sport, is engaged in at night. When properly prepared this bird is palatable and is eagerly sought by housekeepers.

It is strange that the good people of Tennessee will allow the pot hunters of that State to continue the slaughter of innocent birds at the disgraceful rate and in the brutal manner outlined in the foregoing dispatch. There are thousands of men and women in Tennessee who are opposed in sentiment to this kind of slaughter, and they should rise up and demand of their law makers that it be stopped. It could be stopped in that State, as it has been in a dozen others; and I trust some strong, active man or woman may soon take the initiative in securing such legislation as will put a heavy penalty on the killing of a robin or any other song or insectivorous bird at any time. EDITOR.

MY TWO-PRONG.

We had been hunting 2 weeks in the vicinity of Laramie peak, Wyoming, and had not succeeded in getting anything larger than rabbits and grouse. Deer and bear signs were plentiful, but owing to the extreme dryness of the brush it was almost impossible for us to move without making more or less noise, and thus alarming the game.

We had planned a big hunt one day, intending to start at daylight, but in the morning we found it had been raining all night and was still misty. My partner decided to forego the pleasure of a tramp through the dripping underbrush, so I started alone, expecting to return in time for breakfast.

I had hunted about 2 miles up Green canyon, and on coming out of a quaking asp thicket caught sight of a 2-prong mule deer feeding about 125 yards ahead of me in a park. On seeing me he started for the pine timber, about 100 yards to his right. So doing he gave me his broadside, and the ball opened.

The first shot from my 40-82 Winchester picked up the sod about 2 feet behind him. I got his speed and the second shot went home with that dull spat which makes a sportsman's nerves tingle. I had the satisfaction of seeing my beauty lower his tail and tie a knot in his back as he disappeared in the ferns.

I picked up his trail at the edge of the timber, and after following it in about 100 yards found him all in a heap at the foot of a big pine. My bullet had entered his body just behind the shoulder blade and passed through, making a clean wound and not spoiling a pound of meat.

S. D. Sewal, Marion, Ind.

A POT HUNTER IN TEXAS.

If ever there existed a locality where game needed protection this is the spot. The warm climate, and the food afforded by the rice fields and marshes make this the ideal home for ducks, snipe, etc.

As soon as this game begins to fly every loafer in the county oils up his cannon, and every flock of ducks that chances to alight within range is sure to suffer the loss of one to 3 dozen birds.

I chanced to hear a fellow remark that he had "killed 27 ducks in 2 shots with a single barrel gun." When asked how he managed it, he replied: "Sneaked up on 'em in a canal and shot into the flock while they were feeding." When asked if he enjoyed that kind of shooting he said: "Well, I guess so; I sold 'em for $3.

Despite all this, the following clippings from the Houston (Tex.) Daily Post will show that some of the proper spirit exists in this State.

> Texas quails have hit on a combination. They are dining largely on the bold weevil, thereby contributing to the public good; at the same time this diet makes their flesh unpalatable and discourages sportsmen, thereby contributing to their own good. Success to their efforts.
>
> The shipment of game in milk cans is the latest move adopted by those who desire to evade the game laws. Three innocent looking new milk cans that came into St. Paul by the Northern Pacific express, when seized and opened, were found to contain 100 quails.

Joe Rice, Beaumont, Tex.

A WEAK-KNEED JUSTICE.

Here is a clipping which shows that it is a nice thing, in more ways than one, to be a millionaire.

> Richmond, Va.—Senator J. H. Cochran, of Williamsport, Pa., and a dozen officers of the Pennsylvania Central railroad, who are his guests at the Rosegille estate near Saluda, Middlesex county, were in a magistrate's court at Saluda this morning on the charge of violating the game laws. Squire Davis, the gentleman who held the reins of justice, was somewhat abashed by the fact that more than $50,000,000 were represented in his court, and soon acquitted the magnates of the charge of killing birds out of season.

"Squire Davis, the gentleman who held the reins of justice," held them with a mighty loose hand.

Foster Garrison, Jr., Paulton, Pa.

ANSWER.

The chances are that if a party of poor, ignorant laboring men were brought before Squire Davis, charged with violating the game law, and that if the charge were proven, the Squire, would fine them heavily. He should have treated the millionaires just as if none of them had a dollar in the world. If they were proven guilty of breaking the law, they should have been fined to the limit and compelled to put up. This allowing wealthy men to violate the laws simply because they are wealthy, is disgusting, and any judge who excuses the misdemeanor on any such ground violates his oath and should be impeached.—EDITOR.

GAME NOTES.

Mr. Frank Stallings and Messrs. Miller and Dillon, the Detroit baseball players, who are visiting Mr. Stallings, returned this morning from a hunting trip in the vicinity of Catherwood, Ellenton and

Silverton. They say they had a glorious time and found game in abundance. They killed 3 turkeys, a number of ducks and 340 quails.—Augusta (Ga.) Herald.

I wrote Mr. Stallings about this matter and he replied as follows:

The quail shooting you ask about took place near Irvington, S. C. There were 3 in the party. It was an all-day hunt, each man working a separate dog. We bagged 292 quails and one wild turkey.

F. M. Stallings, Augusta, Ga.

ANSWER.

It is not surprising that the baseball players should have made hogs of themselves, because they are accustomed to rooting for other games than the ones they play at, but Mr. Stallings is postmaster at Augusta, and one would naturally expect him to be a gentleman under all circumstances. He has, however, besmeared himself with the filth of the game hogs' wallow, and President Roosevelt, being a thorough sportsman, should remove him at once.—EDITOR.

It was on a clear, cold morning in November that we started from our camp on the bank of Little Spokane river, about 25 miles North from Spokane. The first rays of the morning sun diademed the head of Mount Carleton, among whose foot-hills we were to hunt for deer. We kept on our march for several hours, with only a chance shot at a rabbit or grouse. At length we began to discover fresh tracks of deer, and pushed forward, occasionally following a track for a long distance. Not a deer came in sight. The sun had well nigh reached the meridian before we stopped to lunch, after which we began to retrace our steps to camp. A long and circuitous tramp over fallen trees and through tangled underbrush brought us to the backbone of a long mountain, and we took a bee line for camp. Within ½ a mile of it a large fat doe appeared with head erect and nostrils distended. "Bang," "bang" went our guns and down it came. We set about dressing it and having completed the job we loaded it on one of our saddle horses and started home.

G. F. Brill, Spokane, Wash.

I received your letter asking if I killed 37 quails in one day. I did. It was the largest bag I made last season, though I many times killed more in previous years. Eight years ago I shot 110 quails in one day.

Covington Reynolds, Bridgeville, Del.

And so it appears that you are one of the Delaware breed of swine who have not yet been reached by the enlightening influence of RECREATION. If you had been reading this magazine you would have known long ago that the making of such bags as you boast of puts you in the pen with the other game hogs.—EDITOR.

My favorite sport is hunting. I have a single barrel Forehand shot gun, a double barrel muzzle loader, a 50-70 Springfield rifle and a 22 Hamilton. Sometimes my father hunts with me. The other day I went out with my single barrel to a place 2 miles distant from our farm. I was looking for fox squirrels and saw something in a large squirrel's nest. I blazed and the object disappeared. Then I saw something in the crotch of the tree, and when I fired, down came a raccoon. Another stuck his head out of a hole in time to get shot, and just then the one on the nest fell. I think 4 coons in 2 minutes is doing well.

Jason I. Chappell, Springport, Mich.

A dozen years ago we had abundance of sage hens and prairie chickens. Now they are rare.

Herds of sheep range over the country, trampling over the nests, breaking the eggs or frightening the mother from her post, when the Dago herders gather and eat the eggs.

These shepherds are worse than game-hogs. Deer will not stay where the sheep range, so we are losing our deer, too.

Our game laws are not enforced. No game is protected. A whole day's tramp will not secure half a dozen shots.

James P. Riley, Humboldt Co., Nev.

All over this country men who take RECREATION and men who do not; men who like it and men who do not; men who curse its fighting editor and men who do not, have been influenced by the new gospel of game protection, which it is so industriously engaged in spreading.

You have reared a mighty monument to yourself. No marble erected to your memory can ever prove so enduring as your work in shaping and permanently forming American sportsmanship.

Dr. A. J. Woodcock, Byron, Ill.

Charles Hileman and William Cartwright, wire nail workers, started out from Anderson, Ind., before daybreak for a hunt. Hileman has a bird dog and his son has a goat. The dog and the goat are about the same size and sleep in the barn. The barn was dark at the time the rig was got out for the hunting trip. After all was ready Hileman went into a dark corner to pick up the dog, which he supposed was asleep. He got the goat instead, and not observing his mistake, put Billy into the rear of the wagon. After the wagon had bumped over the roads 2 miles from town the goat gave a plaintive bleat, and the hunters hurried back to town, but too late to cover up the joke. The dog was still asleep in the barn.—Indianapolis News.

FISH AND FISHING.

ALMANAC FOR SALT WATER FISHERMEN.

The following will be found accurate and valuable for the vicinity of New York City:

Kingfish—Barb, Sea-Mink, Whiting. June to September. Haunts: The surf and deep channels of strong tide streams. Baits: Blood worms, shedder crabs and beach crustaceans. Time and tide: Flood, early morning.

Plaice—Fluke, Turbot, Flounder. May 15 to November 30. Haunts: The surf, mouth of tidal streams. Baits: Shedder crabs, killi-fish, sand laut. Time and tide: Ebb, daytime exclusively.

Spanish mackerel—Haunts: The open sea, July to September. Baits: Menhaden, trolling—metal and cedar squids.

Striped Bass—Rock Fish, Green Head. April to November. Haunts: The surf, bays, estuaries and tidal streams. Baits: Blood worms, shedder crabs, Calico crabs, small eels, menhaden. Time and tide. Night, half flood to flood, to half ebb.

The Drums, Red and Black. June to November. Haunts: The surf and mouths of large bays. Bait: Skinner crab. Time and tide: Day, flood.

Blackfish—Tautog, April to November. Haunts: Surf, vicinity of piling and old wrecks in bays. Baits: Sand worm, blood worm, shedder crabs, clams. Time and tide: Daytime flood.

Lafayette—Spot, Goody, Cape May Goody. August to October. Haunts: Channels of tidal streams. Baits: Shedder crabs, sand worms, clams. Time and Tide: Day and night flood.

Croker—July to October. Haunts: Deep channels of bays. Baits: Shedder crabs, mussels. Time and tide: Day flood.

Snapper—Young of Blue Fish. August to November. Haunts: Rivers and all tide ways. Baits: Spearing and menhaden; trolling pearl squid. Time and tide: Day, all tides.

Sheepshead—June to October Haunts: Surf and bays, vicinity of old wrecks. Baits: Clams, mussels, shedder crabs. Time and tide: Day, flood only.

New England Whiting—Winter Weak-fish, Frost-fish. November to May. Haunts: The surf. Baits: Sand laut, spearing. Time and tide: Night, flood.

Hake—Ling. October to June. Haunts: Open sea surf, large bays. Baits: Clams, mussels, fish. Time and tide: Day and night, flood.

Weak-fish—Squeteague, Squit. June to October. Haunts: Surf, all tideways. Baits: Shedder crabs, surf mullet, menhaden, ledge mussels, sand laut, shrimp. Time and tide: Day and night, flood preferred.

Blue Fish—Horse Hackerel. June to November 1st. Haunts: Surf, open sea and large bays. Baits: Menhaden, surf mullet and trolling squid. Time and tide: Daytime; not affected by tides.

SOME NEEDED AMENDMENTS.

We hope to have a law passed here this year to shorten the time for taking brook trout to the months of May, June and July. I wish it might be still further shortened to June and July, but we can not expect too much at first.

I do not like the idea of protecting the small trout and allowing those to be caught that are old enough to deposit spawn; for where do the small trout come from if not from spawn. Who ever saw a female trout under 6 inches in length that had spawn ready to cast? That matter seems to have been overlooked. I should say to save the trout 8 inches or over in length and let those smaller be caught. By following that plan our brooks would be much better stocked with trout. Am I alone in so thinking?

C. L. Fisher, South Deerfield, Mass.

ANSWER.

The object of laws regulating the taking of fish is to preserve the species in reasonable abundance. Ordinarily this is done by means of a close season; by fixing a minimum size limit for the fish that may be lawfully taken; and by limiting the number that may be taken. The close season, with most species, should include their spawning time, and this results in the protection of large fish at the time of their greatest usefulness. Large fish are also protected by limiting the catch. If fishing is to be allowed during or closely preceding the spawning time of the fish it would certainly be helpful if the large, ripe fish could be spared. But this would probably prove impracticable. It would seem that, if the close season is made to begin some time prior to the spawning season and continue during it, the minimum size fixed at say 6 or 7 inches, and the catch limited to a low number, the best results would be secured.

The protection of adult fish has some advantages, but nature, in a way, does that. The old fish are more wary than the young and inexperienced. Furthermore, the biggest ones usually get away if you do hook them. **B. W. E.**

SHARKS AND THEIR WAYS.

The mouth of a shark is far underneath his head; therefore he must be under his prey and turn over before he can bite. Sharks are fond of turtles; those big ocean turtles, you know, that can swim off with 2 or 3 hundredweight on their backs. The turtle knows the shark loves him, but the affection is not reciprocated. When a shark presses his attention upon a turtle, the latter dives to the bottom and lies low. So does the shark, knowing that the turtle must in time come to the surface to breathe. As a shark's patience will outlast a turtle's breath. the issue is not hard to guess.

On your next ocean trip look over the stern of the vessel; you will probably see a dark brown fish, about 4 inches long, playing around the rudder. They are pilot fish. When you see them you may know there is a shark not far away. Look astern and you will see his back fin just above the surface of the water, He is following the ship, waiting for the pilot fish to signal him that food is to be had. If you go aloft and look down you can see the monster plainly. Make a rope fast to a piece of salt beef or pork, throw the meat overboard and tow it astern. If the shark is hungry you can bring him under the stern; if very hungry, you can coax him right alongside. That is your chance to drive a harpoon into his back. Then hook on tackle and hoist him aboard.

The pilot fish has an oval sucking disk beneath its head. It is also amazingly devoted to its big friend or patron. When you begin to hoist the shark out of water the pilot fish attach themselves to the monster and come aboard to die with him.

A shark dies hard, and while he is about it, take care to stand clear of his tail, When he is dead take off his hide, dry it and use it for sandpaper; that's all the creature is good for.

I have heard shipmates tell of sharks 20 and 22 feet long. The largest I ever saw was not over 14 feet.

Sailors are supposed to do their own washing, mending, etc., but in the merchant service they often make the ship act as laundress. They fasten their soiled clothes to a rope and tow them overboard until they are clean, or at least what Jack calls clean. One day I had my wash out on the line. When I went to haul it in it was missing, The next day we harpooned a shark, cut him open and I got my washing back. C. L. Herald, Findlay, O.

AN OREGON FISH HOG.

Pat Murphy of our city is a fisherman of tremendous ability. Others may catch bigger fish, but for numbers he outclasses his fellows emphatically. Every day for 2 weeks Pat went to the river and each day returned with a string of little trout reaching into the hundreds. During the season Pat says he has caught 2,744 trout. Last Friday he had a string of 144 trout most of them about 6 inches long, although there were a few of larger growth. Pat says he caught them in 2½ hours. A fish a minute seems pretty fast fishing. He uses salmon eggs for bait and gets almost every nibbler. — Rogue River, Ore., Courier.

I wrote to Murphy, and here is his reply, *verbatim et literatim:*

Grant Pass, Ore.

Dear Sir:—

I have received your date of the letter menching whether I caught 144 trout in one day; Yes sir I caught them in two hours and a half. I caught them 2744 in Fifteen days I can prove it by 2000 people in grant's Pass. I am suppose to be the best fisherman in this town and I will sometime send you my picture with a string of trout—Ranging from 6 inches up to ten pounds You may thinking I am braging but if you where here I would soon prove that I aint I can cast a line with rush a 12 ounce poll 89 feet while in casting a small hook of course I aint much hand for catching large fish but little trout from 6 to 12 inches I wont take a back seat from nobody Well good Bye Hoping To here from you soom I Remaing yours ever

Arthur S. Murphy.

Supposed to be the best fisherman in your town, eh? I doubt it. I imagine there must be a lot of decent people in a town of 2,000 inhabitants, none of whom would ever think of rating you as a fisherman, but simply as a low, vulgar brute who would delight in destroying fish and all public property that he could get away with without being arrested and punished After all, such men have their uses. By displaying your swinish instincts you inspire good people to demand the enactment of laws to punish such as you, and if you and a few more keep on, Oregon will, one of these days, have a law that will place you behind bars.—EDITOR.

A CATFISH KEEPS GUARD.

My friend, Mr. McVeigh, who is a student of nature, was camping in the highlands of Ontario. One bright morning while standing on a log in shallow water, he noticed a small catfish, *Amiurus catus*, near the log and close to the bed of the lake.

It seemed hovering over some object of consequence, as it remained in the same position, although McVeigh was in full view. Wondering what the little chap was doing, the interested spectator looked more closely and saw beneath the fish a ball of spawn several inches in diameter. Going to the tent my friend returned with a piece of bread and a bluebottle fly. Rolling a moistened crumb in his fingers he dropped it about a foot from the fish. Immediately the little guardian darted for the crumb, which he caught before it reached the bottom. Returning to his charge, he spewed out the crumb to one side of the spawn. McVeigh then impaled the fly on a long straw and gently pushed it toward the fish. Again there was a rush and the fly was caught and carried back to the nest. When released it popped to the surface like a cork and swam away.

Calling his little spaniel, Mr. McVeigh bade him take the water and walk out to the fish. When within a few feet of the nest the brave little fish darted at the dogs' leg, much to the surprise of doggie. Then McVeigh put the little guard's bravery to a still more severe test. Making a running noose on a piece of string he carefully worked it over the fish's head, and with a quick jerk brought him out on the log beside him. Waiting until he thought the little fellow had about forgotten home and family, he put him in the water on the other side of the log. In about 3 seconds the fish was back in his old position.

Three days later the adult fish had disappeared, but close to the old spot was a black patch of wriggling young catfish.

R. C. W. Lett, Ottawa, Can.

LEAVE SOME FOR OTHERS.

In Oregon and Washington the law limits an angler to 125 fish for a day's catch. That is certainly liberal. I see that you roast men who catch 40, 50 or 60 fish in a day and call them fish hogs. Would you hold a man in Oregon to the same limit that you think is right in the Eastern States? If I go 20 or 30 miles to fish, do you want me to stop at 40 or 50, when there are a dozen men on the same stream who will catch the legal limit if they can? If a man takes a little vacation in the mountains and finds fishing good, he will naturally want to salt or possibly dry and smoke a few fish to take home. Would you blame him if he caught his legal allowance in that case? If a man is a fish hog on either of these propositions, then every fisherman in Oregon and Washington is a hog. And our hunters are the same. They will shoot the limit if they can.

Myron Otis, Portland, Ore.

ANSWER.

No man has a right to waste fish in Oregon or in any other State. The fact that trout are so plentiful in your State that a man can catch 100 in a day does not justify him in doing it even if the law does permit it. I claim that no man has a right to fish for his neighbors; that he should simply take a reasonable number for himself and his family for a day or 2 and let others do the same. If the present slaughter of fish is allowed to go on the time will come when trout will be just as scarce in Oregon streams as they are in New England streams to-day.—Editor.

PROBABLY PARASITES.

In the South central portion of New York State is a meadow brook which has for a number of years been one of the most satisfactory and enjoyable fishing grounds in that portion of the country. It is fed by a number of large springs which have particularly low temperature and it flows scarcely more than a mile before emptying into a pond which is the termination of the trout fishing. Up to last season, the fishing and the fish themselves were in ideal condition; but last year, owing, perhaps, to an unusually protracted and high flow of water, the stream, which is not large, became seriously clogged with watercress for the greater part of its best fishing length. For perhaps to this or some other reason, with which I am unacquainted, many of the trout have become affected with some sort of a disease which is marked by a kind of prickly black scale, or parasite, covering their bodies more or less extensively. Kindly advise us whether this is due to the growth of the watercress or to some other cause; and in any case whether there is any remedy for the disease. If so, what is it?

Remington Squire, New York City.

These are probably parasites known as psorosperms of some sort. Positive identification is, of course, impossible without specimens. If Mr. Squire will kindly send one or more specimens of the fish to the U. S. Fish Commission, Washington, D. C., the parasite can be identified for him and the cause can then be better understood. Ordinarily parasites of these kinds attack fish which are enervated or weakened in any way through unfavorable environment, such as may be produced by insufficient water supply, too high a temperature, impure water, too much crowding, insufficient food, etc. The presence of too rank a growth of watercress might lead to similar results, but it is not probable.—Editor.

WHICH ONE IS THE LIAR?

I should like to place 2 big, fat hogs in your private pen. One I call Pat. H. Connell and the other Ed. L. Case. October 24th, between 5 and 6.30 o'clock, they caught 347 pounds of pike and bass. I can not give them a proper roast, so kindly help me.

Game and fish are abundant here. Quails are protected until Sept. 1, 1903. We have no spring shooting in Wisconsin; a good State with good sportsmen. There ought not to be any law against killing game hogs, same as any other porkers.

L. C. D. Prairie du Chien, Wis.

On receipt of this letter I wrote Connell and Case, asking them if the statement was accurate. They replied as follows:

Yes; but there were 3 of us and we caught 437 pounds in one day.

P. H. Connell, Prairie du Chien, Wis.

Your informant is wrong. Pat Connell and I, 2 thorough sportsmen, in one afternoon caught 447 pounds of fish instead of 347 pounds. We could have caught more but it grew so dark we could not see the lines.

Ed. L. Case Prairie du Chien, Wis.

It appears that these 2 men are not only shameless butchers but one of them is also a liar. Connell says there were 3 in the herd; Case says 2. Which is the liar? I say Case. What is your guess?—Editor.

A GOOD PLACE TO GO FOR TROUT.

Fishing through the ice has begun on Elk lake. Mr. Norman Hawley captured an 8 pound Mackinaw trout to-day. Mr. Hawley is the captain of the steamer "Marie." He pilots fishing parties around and through the numerous lakes near this place. If any angler wishes to enjoy a week or more fishing for black bass, muskalonge or brook trout, let him visit this place during June. We have a grand inland waterway. Leaving Elk Rapids for Bellaire on Intermediate river the steamer passes through 5 rivers and 5 lakes on the route, and such fishing! While the steamer is passing up Torch river one can take up a position on the hurricane deck or the prow and see rainbow trout, speckled trout, Mackinaw trout, bass and pickerel darting in every direction. The water is so clear the bottom of the river is visible throughout its entire length. Near where Torch river leaves Torch lake, Rapid river flows in, the greatest trout stream in Michigan. There are many rainbow and brook trout in Torch lake, and at certain times they run up Rapid river in schools. One man from Traverse City caught 40 pounds of trout in one half day at this place. Of course he is a fish hog. He always fishes for count. There are a few such in this country.

Brown Hackle, Elk Rapids, Mich.

NIBBLES.

One morning in May I was fishing in the beautiful and rapid Cedar river. I had fished down from Stover, 5 miles from Bellaire, and had caught 10 trout, 8 to 10 inches long. Just below the outlet of Intermediate river there is a stave mill. On the mill dock one of my friends was standing, and I went out to show him my catch. I was 10 years old at that time and, naturally, more than proud of my 10 fish. While talking I cast my line from the dock, though without the least expectation of hooking anything. I went on talking. Suddenly my line ran out until the reel was almost bare. It took me 10 minutes to win back as many yards. By that time all the mill hands were watching the fight and yelling instructions. I was too excited to pay much attention to what they told me. At last my big trout tired and I got him in. He weighed 3 pounds, one ounce; the largest trout ever caught in Cedar river.

Charles Cross, Bellaire, Mich.

The town of Weld, in which I live, is situated among the hills and mountains of Northwestern Maine. Near it lies a sheet of water, 6 miles long and 2½ wide, known as Lake Webb. In that lake are found landlocked salmon, brook trout and black bass, besides great numbers of pickerel. Fishing during May and June is unexcelled, and through July and August bass and pickerel are taken in any quantity. Though 12 miles from a railroad, access to this ideal resort is readily had by stages in about 2 hours' time from the station. Between 30 and 40 summer cottages have been built in the last few years for the accommodation of visitors. The scenery is the finest in the State of Maine. Deer and bear are numerous. Guides can be procured at any time in the fishing or hunting seasons. Any one wishing a place to spend a vacation, whether sportsmen or not, will make no mistake in coming to Weld. Good board can be found at hotels or farmhouses.

Lester L. Jones, Weld, Me.

For many years the sloughs below Warsaw, Ill., were famous fishing grounds, and they would have remained so until the present day but for the great mistake the fish commissioners made in stocking our waters with German carp, which destroy the spawn of game fishes, and render the water so muddy at times that bass or crappie cannot see the bait.

Twenty years ago I saw 90 black bass taken by 3 men at Brandy Bend, 6 miles below Warsaw, in the afternoon of one day and the forenoon of the next, and all caught with spoon hooks. Many of these fish weighed 2, 3 and 4 pounds. Good catches have been made at the same point during the last 2 years. The publisher of the Constitution-Democrat and I have taken, the past season, with rod and line, 281 black bass and 678 crappie. *Illinois paper.*

The writer of the above has a colossal nerve to charge the disappearance of game fishes in Illinois waters to the German carp. In his own statement he acquits the carp and convicts himself, the editor of the Constitution-Democrat and a lot of other swine, of the crime of having destroyed the game fishes of those streams.—EDITOR.

William West of Papillion, Neb., was convicted in December last of fishing in the Platte river with hoop nets in violation of law and was fined $20 and costs. When West was arrested he put up a big bluff about shooting the officers, but the cowards who steal fish from the public in violation of law have not courage enough to fight, and West proved no exception to the rule.

The clipping from which the above information is obtained was sent me by R. C. Barton, of Papillion, who adds, "William Childers, another fisherman, got into the same fix. The State Fish Commissioners came down the river in a boat, found Childer's nets, burnt 22 of them and turned loose about 1,200 pounds of fish that were confined in fish boxes. The Commissioners gave him 2 weeks in which to leave the State or be prosecuted. Childers got out in preference to being cinched."

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

GUNS FOR BIG GAME IN THE FAR EAST.

New York City.

Editor RECREATION:

When I left America for the East my hunting arms consisted of one 50-100-450 and 2 30-40 Winchester rifles. I had long studied the question of heavy *vs.* light rifles, but opinion seemed so divided that I was, after all, left to follow my own judgment. I argued that a small bullet in a vital place was as good as a large one, and guided only by my experience with big game in this country, I chose my weapons as above.

When I lost an elephant and a rhinoceros, and narrowly escaped being gored by a wounded wild ox, I saw my mistake, and quickly procured a double barrel 12-bore rifle, using 120 grains of powder, and an 8-bore, burning 240 grains. In a comparatively open country, where you can see your game at 100 yards or so and be certain of a clear shot at 50 yards, the 50-100-450 is satisfactory. At least it is to me; though no sportsman in the Far East looks on so light a gun with favor. It would be dangerous shooting, of course, but danger has its attractions.

I should be satisfied with the 50 caliber in any country open enough to permit picking my shot, as may be done in America and in most parts of India and Africa. But in such dense jungle as prevails in Siam, the Malay peninsula, Sumatra, and Java, the sportsman who ventures after elephant, rhino, buffalo, or wild cattle stands a poor chance of scoring and a good chance of losing his life The reasons are not many, but potent. In dense jungle you can rarely pick your shot; you are always at a disadvantage, since you must be prepared for a sudden charge from an animal you can not locate until it bursts on you 30, 20 or even 10 feet away. In the case of elephants or rhino, you are in the thickest jungle, and likely as not sunk half way to your knees in mire. Under such conditions you must have a rifle that will check the charge, at least, until you can get a killing shot. The only vulnerable spot presented by a charging Asiatic elephant is no larger than a saucer; a rhino must be shot in the eye; the buffalo holds his nose so high it is impossible, unless you are on a higher level, to send a bullet into his brain; while wild cattle are most determined to reach an enemy and die hard. To land a fatal shot on any of these animals when charging in thick jungle is beyond the average sportsman.

If you want a fighting chance, you must have a gun shooting sufficient lead with such force that the impact of the ball will bring the charging beast to his knees, and give you an instant's time to put in another ball where it will do the most good.

It is well enough to talk of the shock and penetration of the small bore smokeless rifles, but under the conditions I have cited you want extraordinary smashing power. You must get the beast down, and at once. Unless you can put your small bullet into the brain of the elephant you will not bring him down, nor can you invariably stop either the rhino, buffalo, or wild ox by a well placed shoulder shot.

The 50-100-450 is undoubtedly the strongest shooting of the comparatively small calibers, yet I put 3 50-100-450 metal patched soft nose bullets into an elephant, 2 directly back of his fore leg, and he carried them off swiftly. He shed some blood, which I tracked 2 days. He may have died eventually, but if so that is only one more argument against the smaller calibers. I put 2 full metal patched 50 caliber bullets and 3 30-40 smokeless into and directly behind the shoulder of a rhino swimming across a river. He kept on and disappeared in the jungle on the other side. He got out of the water with some difficulty, and perhaps if I could have crossed the torrent I might have secured him. I put one full jacketed 50 caliber in the shoulder and one soft nose immediately behind the shoulder of a bison, and he rushed me so closely I thought my days of big game shooting numbered.

I was curious about the 30-40 high velocity gun, and made many experiments. Though its execution with soft nose bullets was all that could be desired on deer and small bear, it was useless for larger game, unless a head shot offered. It has been claimed that the motion set up in the molecules of tissue of an animal hit by a high velocity small bore continues to tissue contiguous, and so an enormous shock is given; but it is yet to be proven that there is any deadly shocking power due to vibration set up by the small bullet on its way through the animal.

If the brain could always be reached the 30-40 would be as deadly as the largest bore; but the fact is that for the dangerous game of the East the only reliable weapon is one of the large bores, from 12 to 4. Were I to make another hunt in the dense jungles I should carry a double-barrel, 8-240-1150, rifled about 6 inches at the end of the barrels and bearing rifle sights, and a 12-bore paradox for close jungle work with tiger and leopard. The latter is equally good for shooting shot; but I do not care for the 12-bore rifle. My experience with it was not pleasant ,and convinced me that the ball is too heavy for the quantity of powder burned.

I should always have both with me in the jungle, using the 12-bore if luck gave me a head shot, the 8-bore if only a body or shoulder shot presented, and relying on the latter gun to stop charging animals. I should take also a 50-100-450 Winchester, one of the strongest and smoothest shooting rifles I have ever used, but not into such dense jungles as I visited.

Nothing could induce me to use express bullets or bullets hollowed to any degree. Had I needed convincing evidence of the untrustworthiness of express bullets, my last trip has provided it. Among other proofs I handled the skull of a tiger which had killed one of 2 men who went on foot to wait for him at a drinking pool. The man who paid for his sport with his life used a double barrel 577 express rifle. He missed with his first barrel, and the second struck the tiger on the ridge of the eye, exploding and blowing the eye out, but not stunning the tiger. The brute was on top of the man before the latter could reload and before the second sportsman could use his 2 shots to advantage. A solid lead bullet would have penetrated to the brain. The express bullet hardly left a mark on the tiger's skull.

The 577 is well thought of in the East by English sportsmen, but I consider the 50-100-450 better adapted for the purposes for which I should use it. It is much more accurately sighted, and can outshoot the 577 at all distances beyond 100 yards. It is for all practical purposes, as killing as the 577, is less bulky, and you have several shots without reloading, against 2 in the 577. However, the simple shot gun mechanism of the 577-168-590 pleases many a sportsman, who knows he could not repair a 50 in case of accident. To illustrate how in the hunting field all preconceived theories and notions are at times severely twisted: It happened that the gun which dealt the killing shot to both the elephant and the rhino of my bag was the 50-100-450 with full metal patched bullets. But on each occasion I had already put 2 12-bore bullets into the animals; in one instance because I could not get a head shot, and therefore did not use the 50 caliber, and in the other because I had the 12-bore in hand. Both times I fell back on the 50, because the shells jammed in the 12-bore, which was an old one and out of repair. The elephant was charging one of my trackers, and gave me a fine view of his head for an instant. My ball went in at his ear and out at the opposite temple, and he dropped instantly, much to the relief of my tracker and me.

The rhino was charging me after receiving 2 12-bore balls as near as I could put them into the fold just back of the shoulder, which is, next to the eyes and around the ears, the most vulnerable spot. I was standing on a little knoll of earth, decaying undergrowth and fallen timber. As the rhino charged he scattered the timber and rolled me down the knoll. Fortunately I tumbled to the leeward side, and the animal, losing my wind, held his course. Meantime I clung to my rifle, and regained my feet. The rhino was not over 20 feet away, and going from me when I put a 50 caliber bullet directly behind his ear. He collapsed without even the customary and ridiculous little squeal with which rhinos usually announce a mortal hurt.

With the exception of a crocodile in the side of whose ugly head I made a great hole with the 12-bore, a peacock brought down with the 30-40, a wild ox dropped with an 8-bore in Burma, and a python, I scored the balance of my bag with the 50-100-450 Winchester.

E. J. Martin.

LIGHT LOADS FOR SMALL CALIBERS.

Hiram, Me.

Editor RECREATION:

Answering H. B. Rantzan: The powder best adapted to miniature loads is Laflin & Rand's sporting rifle smokeless. I have obtained the best results by using a thin card wad over powder. Seat bullet in mouth of shell as usual and leave space between wad and lead unfilled. Of course, a wad can be used only in straight shells. The makers claim this powder will do equally well when loaded loosely. That is not always the case, particularly when U. M. C. No. 6 and No. 6½ primers are used. With strong primers adapted to high pressure smokeless powders a loose powder load is as good as a wadded one. Six or 7 grains of this powder wadded in a 25-21 shell, with bullet seated just over the grooves, gives good results. It is not so satisfactory when no wad is used.

Never try to obtain high velocity and great penetration with this powder; it can not be done with safety because of its extremely high breech pressure. For great power and penetration use Du Pont smokeless powders. I had an 8-pound Stevens Ideal No. 44 swelled in the chamber and ruined by using in it 9 grains Laflin &

Rand and a 91 grain bullet in a 25-21 shell. Until 1901 the makers of that powder recommended 8 grains for a 25-21 load; now they advise 6 grains. Laflin & Rand sporting rifle smokeless is not adapted for full charges in light rifles taking comparatively heavy cartridges. Laflin & Rand's Lightning smokeless, the new tubular grained product, is a splendid powder, and in medium charges all one could wish. Though recommended for high power rifles, it is not adapted to give a velocity of 2,000 feet a second, because it burns too quickly with high breech pressure. I have used 20 grains in a 25-35 with regular metal jacketed bullets. The accuracy seems good, although there is some recoil. The velocity is about 1,800 feet. Judging from the behavior of the rifle I would not use more than 20 grains in a 25-35.

I have found the following load accurate and efficient for 25-35: Eight grains sporting rifle smokeless with a No. 2½ Winchester primer, or 7 grains with a Winchester No. 5 or U. M. C. No. 9½ primer, or 8 grains Lightning smokeless with a Winchester No. 5 or U. M. C. 9½ primer. Use a 133 grain paper patched bullet with Leopold point. The bullet is 1⅛ inches long and has 3 thicknesses of patch paper around it. Powder loaded loosely in the shell. This load will give fine results at 200 yards.

Perhaps I should not mention Lightning smokeless powder in relation with a paper patched bullet, as I have used only 6 charges. Those gave good results. Ten grains or more of sporting rifle smokeless does not give good results with paper patched bullets. If a bullet can be patched with paper so it will not strip and lead a 25-35 barrel when used ahead of 12 grains sporting rifle smokeless, I should like to know how it is done.

Has anyone used Laflin & Rand Lightning smokeless for medium loads in black powder rifles? It burns a little slower than sporting rifle, and therefore should be better for full charges, as it would give less breech pressure. The powder burns well, and I believe a No. 2½ W. primer would ignite it thoroughly. F. M.

A SUGGESTION FOR SAVAGE.

Chihuahua, Mexico

Editor Recreation:

In discussing hunting and hunting rifles with many old hunters, the question has often been asked why the Savage people do not make a gun to shoot the 30-40 cartridge, similar to the Winchester. I and many to whom I have talked, think the Savage, as at present turned out, the most up-to-date and finest piece of mechanism ever offered the public in the shape of a rifle, and I think I voice the sentiment of many of Mr. Savage's friends in asking if it is not possible to produce something like a 30-40. What do you say, readers of Recreation?

I believe also something was said in a recent issue of Recreation about Mr. Savage turning out a 22 caliber rifle. I am only waiting to get hold of one.

In praising the Savage, I do not mean to disparage the Winchester, as long and constant use has certainly proven their claim for merit. I think the 30-40 the best gun ever made by the Winchester people; it will do business in any country, and on any game.

It is to be regretted that so many of your contributors talk through their hats, as, for instance, in the matter of the power of smokeless rifles. Several times I have noticed articles from men claiming to be able to shoot through trees 3 feet thick. Coming down to facts, I have tried several times, with both Winchester and Marlin 30-30's to shoot through an oak 7 or 8 inches thick, but have not been able to do so. Should like to get hold of some of those guns that will shoot through 3 feet of live timber, or a grizzly lengthwise. I have seen the 30-30 bullets, as well as the .303 Savage, stop in blacktail deer.

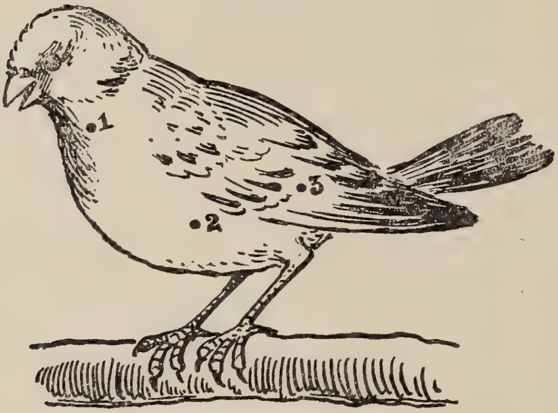
Why don't the Winchester people make a 22 rifle standard with the 30-30, shooting only one kind of cartridge; i. e., the same kind of gun except in caliber? This gun would be something that a hunter could fix up with Lyman sights, or with telescope, and be proud of. I think the 22-7-45 an ideal cartridge for anything under deer, and never want a gun to shoot more than one size cartridge. If the eye and gun are trained for one cartridge, they will not shoot the same with another size. I want to know just what I am doing when after game, without stopping and figuring on the cartridge used. Should like to hear from others on this point. That is the trouble with the Colt 22. It shoots too many different cartridges. So does the Marlin 22.

I believe one trouble with the Marlin is that the cartridge chamber is too small. I was once out with a friend who had a 30-30 Marlin, and all went well until a bunch of 30 or 40 antelope came by within 25 steps, on a dead run. Then his repeater failed to repeat. He didn't, as he repeated many objurgations, backward, crossways, and in every conceivable style. It was enough to make a hunter's blood boil to see those antelope go by with never a shot. I was about 500 yards away and seeing the air grow bluish in his direction, hastened over and found him dancing around like mad, vowing vengeance on everything bearing a Marlin mark.

F. Q. Rutherford.

A MINIATURE SPARROW GUN.

I have a 22 caliber Davenport rifle, 1891 model, which I made into a shot gun for sparrows. I have shot 25 already. I bought a 22 Winchester rifle barrel, 1873 model, for $2, with sights. It happened to be a smooth bore. I rechambered it for the Winchester 22 caliber center fire, and reload with number 12 shot. I can kill a sparrow at 10 or 12 yards every time. I use a 32 center fire shell for powder measure and shot, 8 grains of powder, about ⅛ ounce of shot. I made a new block for center pin and extractor, fitted the barrel to frame, and thus have a 22 caliber rim fire rifle or a 22 center fire shot gun, 2 barrels to one stock. I made my own reloading tools, so I have a rifle and shot gun and tools at a total cost of $10 and 3 days' time. Everybody who has seen it pronounces it O. K. I can shoot 100 shots at a cost of 20 cents and get 80 birds. I observe the game laws.



A GOOD PATTERN FOR A 22 SHOT GUN.

I enclose target made at 11 paces with a 22 Winchester center fire shot cartridge, 8 grains of black powder and ⅛ ounce of shot, about 140 pellets. The weight of the rifle is 4½ pounds; weight with smooth bore barrel 6½ pounds. Length of shot gun barrel is 23½ inches; of rifle barrel 22 inches.

I made a recapper out of 10 cent gas pliers. I use tissue paper for wadding. The penetration is so hard that the shot go 1-16 of an inch into pine boards. Mr Barlow, of the Ideal Tool Company, said the idea is all right. Notice the 3 shot in the bird. This gun is just the thing for boys. I will try for a record at sparrows this year. I have put away my d. b. shot gun; have no use for it.

Chas. Vitous, Sutorville, Pa.

WHAT THEY SAY TO PETERS'.

Harrisonburg, Va.

The Peters Cartridge Co., Cincinnati, Ohio:

Dear Sirs—I see you and the publisher of Recreation are having a dispute about a criticism of your shells. I, as one of your friends, am sorry to see this. It is a short sighted policy on your part. The criticism was not severe; it was only the kind that would bring your friends to tell of the good qualities of the Peters' shells. I hope to see you come out in a dignified way and work with Recreation for the elevation of sportsmanship to a higher plane. You have made a mistake, and the sooner you discover it the better.

Yours truly, E. J. Carickhoff.

Kensal, N. D.

Peters Cartridge Co., Cincinnati, Ohio:

Dear Sirs—Seeing you are getting quite lippy about brother C. G. Radcliff's letter in Recreation, would say that he is O. K. in his statements. Have used your cartridges about 18 months and find them unsatisfactory in every way. Your getting so lippy is going to cause a big decrease in your business. Hoping this will find you ready to commit suicide, I remain, with a handful of your cartridges to sling in the lake, Yours truly, S. K.

AN AID FOR NEAR-SIGHTED RIFLEMEN.

For the last 10 years I have been obliged to wear glasses when reading or doing fine work. I can see at a distance as well as ever, but when shooting a rifle the blurring of the rear sight bothers me, As I have learned many things from Recreation I venture to ask for suggestions on this point. There must be many sportsmen who have the same trouble, and some who can tell me how to overcome it.

R. Alexander, Minneapolis, Minn.

ANSWER.

A good telepscopic rifle sight will give the aid you require. It brings the object aimed at and the sighting apparatus all in the same field and at one focus. Hence the object is clearly seen. The wires for sighting are sharp and distinct, and there is no strain on the eye. The telescope shows a magnified image of the object, and one can aim just where he wishes, whether on the eye or the ear, or any other part. Many men upwards of 70 years of age are still indulging in rifle practice with the aid of a rifle telescope, who would not even try to shoot if confined to other sights. I was recently shown a group of 10 shots, made at 200 yards by a man of 75 years of age. All the shots were in a 2-inch circle.—Editor.

SMALL SHOT.

It is a pleasure to note the success of the Ideal Co when actual trials demonstrate the superior qualities of their products. I see they advertise their new straight line capper and de-capper for the first time in November Recreation. I know by actual use that this little tool, taken in combination, is the best implement in the market for its purpose, and that reloaded shells are as sure fire as new ones after coming from this machine. Another little tool, not yet mentioned in RECREATION, that I highly appreciate, is a resizing die for paper and brass shot shells. The thousands of shells now thrown away after the first fire at the trap may be resized with this die and reloaded a number of times to advantage. So reloaded, they are just as good as at first. I have been experimenting in reloading shells since 1898 and could tell many ways of reducing the cost of ammunition without impairing its effectiveness.

S. L. Warner, Still River, Conn.

I can tell J. S. Miller, Jr., something about the Parker gun. I never used a 16 gauge, but the 10 and 12 gauges are all right for shooting qualities, durability and workmanship. For penetration they can not be beaten by any gun. I have owned 14 different makes of guns and I consider the Parker the best of all. I used a 10 gauge $75 grade Parker 6 years and made some exceedingly long shots with it. Then I bought a $100 grade hammerless, 12 gauge, 8 pound, full choke, and am now using it in the field and at the trap. I use U. M. C. Club shells with 3¼ drams Orange extra No. 3 F. G., 1 card and 2 thick felt wads, 1¼ ounces chilled shot No. 6, and card wad on top well crimped. If Mr. Miller buys a Parker of any gauge he will be more than well pleased with it.

Humphrey Groesbeck,
Hoosick Falls, N. Y.

Mr. Miller, who writes in December RECREATION, will make no mistake if he decides to buy a 16 gauge Parker hammerless. Of all the guns I have used, and they are many, none suits me so well as my little Parker. For duck shooting it has always proved as effective as the 10 and 12 bores of my companions. For field and brush shooting nothing is nearer perfection than a 6½ pound, 28 inch barrel, 16 gauge Parker, loaded with 2 or 2½ drams of powder and one ounce of shot. The gun is a marvel of workmanship and durability. Try one, and in spite of the birds you may at first lose through lack of confidence in the little weapon, you will be convinced that there is nothing better. B. F. Cogswell, Jr., Flatbush, N.Y.

I recently tested my gun, a Richards double barrel, with different kinds of powder. I fired 3 shells loaded with DuPont smokeless powder, 3 with Nitro Club, 3 with Winchester powder and 3 with Laflin & Rand smokeless. The first 3 trios were factory loaded shells, 3 drams powder, 1 ounce No. 8 shot. The last were loaded by myself with 2 drams Laflin & Rand smokeless and 1 ounce No. 7 shot. That load put 14 more shot in a 12-inch square at 35 yards than did any of the other loads. At the same time it drove them deeper. Have been using Laflin & Rand a number of years and in different guns. It has always given the best satisfaction and is the most cleanly powder made.

Geo. F. Kunkel, Nazareth, Pa.

I recently saw an inquiry in RECREATION in regard to Laflin & Rand powder for small charges in the 30-30. I have a 30 Winchester carbine and use a charge of 12 grains Laflin & Rand sporting smokeless rifle powder and the 157 grain Ideal bullet, 9 parts lead to one of tin. This charge has given the most satisfactory results on target at 50 to 200 yards and I find it extremely accurate on small game up to 500 yards. It was first used by Paul Becker, the well known rifle and revolver shot of San Francisco, Cal. With it and a Winchester carbine he won the military medal of the Columbia pistol and rifle club in 1900. Mr. Becker invented and uses a copper front sight with a Lyman combination rear, which I have found a most excellent thing.

Walter Wuerschmidt, Las Cruces, N. M.

I have a few words to say for the benefit of the readers of RECREATION in regard to the Peters ammunition. I think it is about 30 minutes behind time. I was out quail shooting the other day and never made so many misses. I was using Peters semi-smokeless and Peters smokeless, and several missed fire, you can imagine how I felt toward the Peters people when I had it dead on a quail and had the shell miss.

If they can't make shells that can be relied on, they would better not make any. I shall never buy any more of them, if they sell them for 20 cents a hundred

Perry R. Mills, Middletown, N. Y.

There is no better ammunition than U. M. C. Our gun club uses their cartridges exclusively. I broke 29 Blue Rocks out of 36 last week. We shot 24 first and I broke 17. Then we shot 12. I broke the 12 straight and I don't know how many more I could have broken. I used U. M. C. Club shells loaded with Orange Extra powder, 3 drams, 1 ounce of number 6 shot, and I did this work with a $50 Parker hammerless. We recently had a contest, 8 men on a side. All of us except one used U. M. C. Club shells. The 8 men broke 172 Blue Rocks out of 200.

L. H. Kimmel, West Point, Ill.

I use ordinary vaseline to keep my rifle barrel bright. The various arms companies advise against the use of vegetable oils in guns on account of the acids they contain. I wipe the barrel thoroughly with dry and greasy rags until no dirt shows on a white cloth. Then grease well, stick rag in end of barrel and set away. I use a Stevens 32-40 Ideal rifle and like it. I reload my shells, using Winchester '94 model tools. It costs me ½ cent to reload a shell that originally cost 3 cents, factory loaded. How is the striking power of projectiles calculated?

P. H. Manly, Gilmer, Wash.

It is astonishing how many best guns there are in the world. Given any make, any caliber, any twist, some crank is ready to champion it. I have a 45-70, and it is without doubt the best gun in the world. Have also a Stevens 32. With the right man behind it—not me—it easily eclipses all other rim fire rifles. Have also an old 6-foot shot gun. It is the longest gun of its length in the world. And of course my flint lock muskets outclass all which are not their equal or superior.

F. A. G., Woodstock, N. B.

An Ithaca gun should suit Mr. Burg. They are close, hard shooters, durable and exceedingly reasonable in price. I have one, a 12 gauge, 30 inch barrel hammerless, which I use for duck shooting. It is just the thing for that purpose. I like Recreation all the better since the Marlins are out of it. Their ad always reminded me of a gun I bought of them and I want to forget it.

J. W. Fryer, Kansas City, Mo.

I would say to A. G. Burg that I have used most makes of American guns and some foreign ones.

Any American gun of medium grade will do good work. I prefer the Lefever. The H grade at $33 is reasonable in price and will shoot and wear better than any other gun I know of. The compensating features are superior and the material and workmanship are the best.

W. H. DeGroff, Auburn, N Y.

I have found the following a good way to remove lead from a rifle barrel. Have the barrel perfectly clean and dry. Cork one end, fill half full of mercury and let it stand a few minutes. Then cork the other end of the barrel and reverse it for the same length of time. The lead will unite with the mercury and can be readily removed. Wipe barrel well, first with a dry, then with an oiled rag.

Wm. I. Morton, Russellville, Ky.

Those who want a good gun for a small amount of money should buy an Ithaca. I have a 10 bore Ithaca hammerless, 32-inch barrels, weight 10½ pounds. I doubt if a harder shooting gun could be found. It put 6 No. 6 shot half way through a grouse at 85 paces. Nine times out of 10 it will drop a duck at 12 rods. The action is perfect.

C. H. Platt, Milford, Conn.

Will some readers of Recreation tell me what they think of the Parker hammerless gun? I have just bought a 12 gauge $80 grade Parker, with 32-inch barrels. Either barrel will put 275 pellets No. 7 shot in a 30 inch circle at 40 yards. Will it prove a good duck gun?

A. C. Rawson, St. Louis, Mo.

Is the 40-82 Winchester a good rifle for large and dangerous game? Is the 30-30 a more powerful weapon? Are there soft point 40-82 bullets on the market, and do you recommend them?

M. A. Porter, San Francisco, Cal.

ANSWER.

I can cheerfully answer yes to all 3 of your questions.—Editor.

Will Recreation readers kindly inform me which is the best shot gun for all around work? Is the Remington better than the Ithaca? Is the Remington, Grade K, a good gun? I don't care to pay more than $35. How do the '73 and '90 models of the 22 caliber Winchester rifle compare in range and penetration, and which is the best target rifle?

Harrison King, Jacksonville, Ill.

Replying to the subscriber who asks what is the exact difference in bore of a 28 gauge and a 44 caliber:

The actual diameter of the 28 bore gun is .550 of an inch. Of the 44 caliber, and by this is usually meant the 44 Winchester, .424 of an inch. This leaves a difference of .126 of an inch, practically ⅛ of an inch, ⅛ of an inch being .125.—Editor.

To remove lead from a rifle barrel I use brass wire cloth of about 40 mesh, cut in 1½-inch squares, and a wooden cleaning rod. I have used it 10 years and find it perfect. It does not injure the rifling. R. L. Schlick, Milwaukee, Wis.

What are the especial good points of the '95 model Winchester 30 caliber? How does it compare with the 32-40 as a deer and bear gun?

C. R. Benjamin, New York City.

NATURAL HISTORY.

When a bird or a wild animal is killed, that is the end of it. If photographed, it may still live and its educationa and scientific value is multiplied indefinitely.

CHUCKOLOGY.

Hoosick Falls, N. Y.

Editor RECREATION:

The woodchuck is an industrious worker, as one will see by inspecting his home. In excavating his burrow he will throw out flat stones 6 to 8 inches long, boulders weighing 10 pounds and earth enough to fill a barrel.

His home, or main hole, enters the ground at an angle of about 45 degrees and extends 7 to 10 feet before reaching the nest; and there may be several other shafts, or blind holes. These are usually 8 to 20 feet from the principal hole. There is no earth or stone thrown up around them, the entrance is almost perpendicular and is usually overgrown with grass and weeds. It is evident that the earth and stone from these shafts is carried out through the main hole.

It is these blind holes that annoy the farmer. Horses and cattle sometimes step into them and are severely injured. Last summer, while stalking a 'chuck, I stepped into a blind hole, going in the whole length of my leg. My rifle went in one direction, my hat in another and I saw a brilliant display of shooting stars. I lost my 'chuck, but secured a game leg.

A deserted hole can be detected at once by the cobwebs covering it and its general appearance of disuse. The woodchuck is a social animal, as is proved by the trails from one hole to another. Occasionally a hole seems a favorite resort, as there are many trails leading to it; then again there is only the trail from a field of clover or a convenient orchard, or to the blind hole. Farmers tell me that the woodchuck is almost as destructive in a corn field as a raccoon, and that it also eats squash, beans, turnips, and in fact all kinds of garden truck.

The 'chuck is game too, and will whip any dog of his size and weight. Last August while Major Shorkley was hunting on my preserve he heard a furious barking; it was at least half a mile from any house. On looking over a hedge he saw a fox terrier between a 'chuck and its hole. They were having a lively time. The dog would make a rush for the 'chuck and the latter would crouch down and snap his teeth. When the dog retreated the 'chuck would rise until again attacked. After watching the battle some time the Major called off the dog and shot the 'chuck.

One evening the Major came in my office and took from his pockets 16 tails and laid them on my table. On looking them over I noticed that some were short and others long. I asked him how that happened. "Oh," he said, "they are just as I shot them." I did not understand. "Well," said he, "go with me tomorrow and I will show you." I went, and am glad I did, for I never should have believed him had he attempted an explanation. As we were stalking through a meadow, the Major stopped suddenly and pointing to a stone wall, exclaimed, "There! don't you see?" I raised my 'scope and saw a large 'chuck standing on his head like a circus dog, his tail swinging in the air like an inverted pendulum, evidently to attract attention. Crack went the Major's 25-36, off went the tail and into his burrow went the 'chuck. He had lost his flag but saved his bacon. The Major counted one more trophy and all were happy.

One unacquainted with *Areytomys monax* would not think him capable of devising schemes for circumventing the hunter and saving his own life. Mr. J. F. Rabbeth tells us that the woodchucks in the Connecticut valley will unhook their tails and throw them at him in order to save the rest of their anatomy.

Considering the number shot on my preserve it may seem surprising that they are not exterminated. Yet last August I counted 25 holes on ½ acre and on another farm 30 on one acre. We will suppose 10 of these contains each a mother 'chuck. Naturalists tell us that sometimes they breed twice a year and have 4 to 6 at a litter. I will call it 5, which gives us 50 infant chucks. We will deduct 10 for casualities and have 40 left. Did ever one man kill 40 in a 40 acre lot?

The 'chuck goes early into winter quarters loaded with fat, pulls in his latch string and sleeps until early spring.

Twenty years ago the woodchuck was hardly counted as game worthy of attention. Now such men as Baker, Rabbeth, Shorkley and Leopold talk of their 25-36 and 32-40 'chuck guns as they used to of their 40-70 or 45-90 big game rifles.

When a man thinks it requires no skill to kill a woodchuck he is off his reckoning. From my observation a 25 or 32 caliber is none too large. It should be sighted for 100 yards; then one can hold over or under. Most 'chucks are shot this side of 75 yards; but in an open meadow it is almost impossible to get within that distance before they dive into their holes.

I am told by farmers in this vicinity that pot hunters are shooting woodchucks for the cheap restaurants in New York. They are boiled or pickled and served with beer at the Raines law hotels. I do not doubt it, as the meat is equal to mutton in life-supporting elements, and the animal is as much a vegetarian as is the Belgian hare. I was deeply interested in an article I read the other day by a Mr. Donald. He realizes the skill it requires to place a bullet in a 'chuck's head or neck at even 50 yards. His stalking cane is almost identical with Dr. H. A. Baker's which is of metal and telescoped. In it he can carry a ramrod and a wash for his throat in case it should become dusty. Medicus.

WOLVES EAT UP A RAILROAD TRACK.

Portland, Ore.

Editor Recreation:

About 1872 one of the first railroads of the Northwest was built in the Territory of Washington, from Walla Walla to Wallula, along the banks of the Walla Walla river, and following the general line of what is now the Oregon Railway & Navigation Company's road between those points. The road was a primitive affair, and was built, owned and operated by Dr. Baker, of Walla Walla. It had no Pullman cars, chair cars or buffet cars, and the day coaches were mostly platform or flat cars. Instead of having a right of way the road had permission to go through the fields of the farmers; consequently the road was not a rapid transit one, as the train hands had to get off and lay down the rail fences and put them up again after the train had passed through.

The road-bed was constructed by laying cross-ties 6 or 8 feet apart, and on those laying wooden stringers for rails. The heavy traffic over the road caused the rails to wear in spots, so that train wrecks and smashups were of daily occurrence. These were not serious, for when the train crew saw a wreck coming their way they would hop off and let it wreck.

The annoyances, however, soon became detrimental to the interests of shippers, so the owner had to devise some means of overcoming the difficulty. Rails of standard railroad iron were out of the question, as they had to be shipped "the Horn around" and freighted by wagon quite a distance. Strap iron could not be had, an the doctor, with Yankee shrewdness finally hit upon the happy idea of substituting rawhide for strap iron. Cattle were plentiful and rawhide cheap, so the doctor soon had his track layers at work putting the rawhide on to the wooden stringers. The rawhide soon became dry and as hard as iron, and answered the purpose admirably during dry weather.

The winter succeeding the laying of the rawhide track was a severe one for that part of the country. The snow laid on the ground several weeks. The wolves were driven from the mountains by the deep snow and skirmished for a living as best they could in the valleys. When the snow began to melt it softened the rawhide rails, and the hungry wolves soon found the track. When spring came and the snow had melted, the wolves had eaten up the railroad track from Walla Walla to Wallula. C. E. Oliver.

THIS ONE DID NOT EAT MEAT.

Wellsville, N. Y.

Editor Recreation:

What Mr. Horace W. Ward, of Bath, Me., says in Recreation about squirrels eating meat is a surprise to me. During the summer of 1894 a red squirrel lived in our family. He was a great favorite, a perfect pet, and allowed us to handle him in the most familiar manner. He never offered to bite, and never seemed as happy as when being rolled about. He had the liberty of the house, and was only shut up at night to prevent harm befalling him. I had every opportunity to study his habits, and as he nearly always took his dinner at the table with the family, perched on the back of a chair, I learned what kinds of food he liked best; also what kinds he would eat if he could not have what he most wanted. I tried to get him to eat meat, of all kinds that we used, both fresh and salt, cooked and raw, but could never get him to taste any. His favorite dish was full cream cheese, of which he would eat a ¾-inch cube each day. He was fond of nuts of all kinds, but preferred butternuts to all others. We had a large stone near the kitchen door, and a basket of these nuts always sat there. When I would sit down by the stone and take up the hammer, the squirrel would go to the basket, get a nut, and lay it on the stone for me to crack, he sitting just out of reach of the hammer waiting for me to crack the nut. When I had done so he would extract the meat and sit up and eat it. Then he would repeat the operation until he was satisfied. He would eat nearly all kinds of vegetables, but seemed to prefer horse sorrel. He went daily to the wall under the house, pulled out small pieces of dry mortar, ate them, and seemed to relish them.

Warm days in the summer, when I sat in the shade to read, his usual place was on the arm or back of my chair. We captured him when he was quite young, and he never knew what fear was. He would play hide and seek with the members of the family, and when he was found he would frolic around in great glee for a few moments, then hide again, disappearing so suddently as to make it impossible to follow him. His favorite hiding places were the loops in the lace curtains near the top. One morning late in the fall he disappeared. We never knew whether someone stole him or killed him. Wm. J. Whitwood.

NOTES ON PHEASANT CULTURE.

I am pleased to see the growing interest manifested in the various species of pheasants. Unquestionably the pheasant is one of the most beatuiful and useful game birds ever introduced into our country. They are easily propagated, and in the wild state will take to the haunts of our quails and grouse, where they readily thrive on the many insects, berries and seeds. They stand our climate admirably, and even do not seek shelter when the thermometer registers 20 or more degrees below zero.

In confinement the common Chinese or English hen will lay 40 to 50 eggs a season, and rarely sits. Now and then a pheasant hen will hatch and raise a brood of young in confinement. I have one that has raised a brood 2 successive seasons. The Cochin bantam is the best mother. A good Cochin bantam will raise 2 broods a season.

I have been most successful with early hatches. By time hot weather begins the chicks are beyond the ravages of the louse, which, in my experience, has been the most serious obstacle to contend with. Even this has been reduced to a minimum by the judicious use of disulphide of carbon.

For feed I have tried hard-boiled eggs, maggots and the various other things recommended, but have realized the greatest success with Spratt's patent game meal and prairie meat crissel with greens. These, judiciously fed, will never cause indigestion or diarrhœa.

Coops must be kept clean and well ventilated, and should be moved to a new piece of lawn every day.

The English and the golden pheasant are the most easily raised, but all inexperienced breeders will have a fair-sized pheasant cemetery.

I look forward to the day when, through the efforts of our most aggressive editor, the many kinds of hogs will have been stripped of their bristles. Then we, true sportsmen and breeders, can, without exposing them to immediate destruction, populate our fields and forests with this king of all game birds.

Louis M. Bachhuber, M.D.,
Mayville, Wis.

TWO LOONS.

I noticed in January Recreation an account by W. F. Aulds, of the sinking of a loon he had shot. In '89, when living in Minnesota, I shot a loon with a 44-40 Winchester, at about 80 yards. The bird drifted toward shore, belly up, until it was so near I could see blood on its breast. I went a short distance away and got a boat, but when I returned could not find my bird. That night there was a severe storm, and the next morning the loon was found washed ashore.

In April, '85, when the ice began to break up in Lake Sally, near Detroit, Minn., a crack opened about 500 yards from shore. A loon alighted there, and I fired at it with a 40-70 Ballard rifle. At the first shot the bird turned on his back and floated perfectly motionless, but before one of the men could walk out on the ice the loon disappeared. Several of us then pushed a boat out on the ice, and the loon was finally killed with a small Winchester. We found the first shot had cut off the bill close to the head, the shock being sufficient to stun the bird for a minute or more.

The loon is not hard to shoot, if you can fire when he is not looking toward you or has not been alarmed. He will dodge a bullet if on the alert, and I could never kill a loon with shot under any condition.

C. G. Brackett, Millis, Mass.

You are in error about the loon being able to dodge a bullet. That theory has been sucessfully controverted many times. —Editor.

MORE COON CHATTER.

I have hunted 'coons over 30 years and am positive that they have a cry or call. I first heard it when a small boy. Taking me out one day, my father set a line of traps for coons, baiting them with perch heads. He bade me note their location, saying I might take care of them. A severe storm kept me from looking after the traps until the morning of the fourth day. Then my brother and I started out. When within 50 rods of the first trap we heard a 'coon call. We got to a knoll whence we could see the animal, and we watched him fully 5 minutes. He was caught by the toes of one forefoot and was sitting on a little pile of stuff he had scraped together, calling. Since then I have heard the call scores of times.

B. W. Farr, Erie, O.

I can add my testimony to Mr. F. W. Allard's that the peculiar noise which some maintain to be coon chatter is really the call of the small barn owl. Only a few nights ago my hired man came down from his room and insisted that he heard a 'coon calling near. I went out quietly, listened, and presently heard the familiar sound. Going to the back of the house I saw an owl sitting on the eaves-trough and chattering softly. I called the man out to listen and convinced him that what he had always thought coon chatter was only owl chatter. A. D. Milford, Ont.

A CUMMUTED SENTENCE.

I recently delivered to Curator Beebe at the Zoological Park, a live American barn owl. A gentleman brought the bird to me with the request that I kill it for him as he wanted to have it mounted. Said I, "I would no more kill it than I would my favorite dog." I happened to have a mounted owl that my brother shot long years ago. Placing it near the live bird, I said, "Mackeown, which would you rather see, this live bird transformed into a dusty, disfigured mummy like that, or see him on exhibition at the New York Zoo as perfect as nature made him?" "Give him too the Zoo," replied my friend, "and when I want to see him I will go there." But if an owl had been brought to me 2 years ago, before I joined the L. A. S., it wouldn't have lived 10 minutes. This owl was captured by an engineer of the Erie railroad in the cab of his engine, early one morning. The engine had been standing on a siding and the owl had taken refuge in it. Credit the bird to Fred W. Mackeown, Rutherford, N. J.

C. D. Brown, Rutherford, N. J.

THESE GROUSE DRANK.

Five years ago last October I went to West lake to shoot ducks. Before light I had my decoys in place. It was a clear, mild morning and while waiting for the ducks to move, I lay back in the blind and listened to the song birds in the woods behind me. Just as the Eastern sky was growing red I heard the whirr of a grouse. The bird passed almost over me and lit on a branch of a dead tree lying in the water 80 or 100 yards from me. Presently it was joined by a second grouse. For a few minutes they remained perched 5 or 6 feet above the water. Then, hopping from branch to branch they reached the level of the lake and drank. At least they went through all the motions. They dipped their bills in the water and lifted their heads just as a barnyard fowl would when drinking. Then they returned to the upper branches and looked about. I think they saw my decoys for they straightened up and sat as motionless as sticks. Finally one flew, sweeping around just outside the decoys. As it passed I fired and killed it.

A. D. Milford, Ont.

NATURAL HISTORY NOTES.

Mr. Henry A. Morgan's account of a friendly grouse in the Natural History department of RECREATION, reminds me of a somewhat similar incident which I witnessed a few years ago. One day when our family were eating dinner we were all much astonished at an object which came through the large dining-room window with a tremendous crash and dropped on the floor near the table. We soon found the object to be a full-grown grouse, stone dead, with a piece of the window glass sticking in its back.

It had probably been pursued by a hawk, and in its haste to escape such a fate it came to its death in an entirely different manner.

The next dav, while working about 500 yards from the house, my brother noticed a hawk in pursuit of a grouse, which flew to the same window and lit on the sill, remained there a few moments and then flew away.

Francis Little, Lakeside, Wash.

My neighbor, E. A. Frost, has a ruffed grouse whose mode of life is so different from that usually followed by *Bonasa umbellus* that it may be worth writing of. It was first noticed in the woods near the village by a boy who saw it crawl under a low bush. He caught it and was surprised that it made no resistance and seemed well content to be handled. It was put into a shed with the fowls for a few days and it ate with them as if fully accustomed to their ways. Escaping one day from the shed it stayed near until discovered, when it was again easily caught and brought to the village for Mr. Frost, who is well known as a fancier. It was provided with good quarters for the winter in a roomy cage in the rear part of Mr. Frost's place of business, where it seems satisfied with its good fortune in not having to rustle for its own feed. The bird shows a great liking for sweet apples, in connection with its usual grain.

F. S. Morgan, Milton, Vt.

A strange thing happened recently almost in the center of our village, and close to a church, where people were assembling for service. A ruffed grouse came sailing along and hit a wire netting fence. It struck with such force that the head was severed from the body. A. Andrews, Fournier, Ont.

Wife—I see the doctor has stopped calling at Smith's, across the way.

Husband—That's strange. I don't see any crape on the door.—N. Y. Herald.

Teacher: What distinguished foreigner aided the Americans in the revolution?

Small Boy: God.—Exchange.

THE LEAGUE OF AMERICAN SPORTSMEN.

OFFICERS OF THE L. A. S.

President, G. O. Shields, 23 W. 24th St., New York.

1st Vice President, E. T. Seton, 80 West 40th St., New York.

2d Vice-President, W. T. Hornaday, 2969 Decatur Ave., Bedford Park, N. Y.

3d Vice-President, Dr. T. S. Palmer, Dept. of Agriculture, Washington, D. C.

4th Vice-President, A. A. Anderson, 6 East 38th St., New York.

5th Vice-President, Hon. W. A. Richards, General Land Office, Washington, D. C.

Secretary, A. F. Rice, 155 Pennington Ave., Passaic, N. J.

Treasurer, Austin Corbin, of the Corbin Banking Co., 192 Broadway, New York City.

ANNUAL REPORTS OF THE STATE DIVISIONS.

MINNESOTA.

In the year just closed the League has secured some gratifying results in Minnesota. With the active assistance of the Herron Lake Gun Club, a large number of petitions were sent out last winter asking the Legislature to prohibit the sale and shipment of all game, including ducks, within the State. We found the sentiment in favor of such a law stronger than we had expected. Within a few weeks, we had secured about 6,000 signatures from all parts of the State. The thanks of all true sportsmen are due to Senator Meilicke, of Windom, who introduced the bill in the State Senate, and gave it his constant attention until it had received the Governor's signature. So strong was the influence of the League and its friends that the bill passed with little opposition. This bill has relegated the exploits of the market hunter in Minnesota to the realm of history.

I can not too highly speak of the efficient work done for game protection and for extending the influence of the League by Vice Warden Henry A. Morgan, Albert Lea; Rear Warden C. M. Morse, Winona, and Secretary-Treasurer Albert R. Bixby, St. Paul.

The thanks of the League are also due to this county, and confidently expect favor- State Game Warden S. F. Fullerton for his zeal in prosecuting law breakers and to Dr. Justus Ohage, Health Commissioner of St. Paul.

The Minnesota division has grown from 30 to 300 members within the calendar year and now includes nearly all State officers. We are sending out thousands of circulars, and by the time the next Legislature meets, we expect to be at least 2,000 strong.

The outlook for efficient game protection in Minnesota is decidedly encouraging.

But I regret to state that thus far all the active work has been done by men of moderate means and little leisure. It seems that the men of wealth and leisure might find as noble a field in providing and preserving wholesome recreation for the masses as in providing them with schools and libraries.

The following local chapters have been organized:

Albert Lea. Henry A. Morgan, Rear Warden.

Winona. C. M. Morse, Rear Warden.

St. Paul O. T. Denny, The Buckingham, Rear Warden.

D. Lange, Chief Warden.

The 18th day of July last, I received information that one C. B. Conlin, at Alden, this county, had violated the game law by killing or having quails in his possession. I immediately placed the information in the hands of Deputy Game Warden Louis Kroessin, of this city, who investigated the case, and secured the evidence necessary to convict. July 20th, 1901, complaint was made before D. K. Stacy, a city justice of this city, against C. B. Conlin, charging that on the 14th day of July, at Alden, this county, he unlawfully had in his possession 2 quails. Conlin was accordingly arrested and arraigned the same day. He pleaded not guilty, and had the case adjourned until the 26th day of July, for trial, but when the case was called, pursuant to adjournment, he changed his plea to that of guilty, and was fined $20 and costs, or 25 days in the county jail. The costs amounted to $7.30, making a total of $27.30, which he paid.

Conlin's youth and his plea of guilty saved him from more severe punishment, but the case excited much interest, was widely commented on, and had a deterrent effect. The League was responsible for the prosecution and conviction, which gave it an enviable position and placed it in good standing at once.

The 22d of August, 1901, Deputy Game Warden Louis Kroessin was informed by Claude Judd that F. W. Kahler, Charles Fink, J. E. McGrane and Thomas Clements had gone or were going into the country with sundry dogs and guns, and under circumstances that were suspicious. Accordingly, Kroessin and Judd shadowed them and sighted their outfit in a field in the town of Pickerel Lake, some 5 or 6 miles from this city. Kahler and Clements, with 2 dogs, were in the stubble and were seen to fire a number of shots, presumably at prairie chickens, while Fink and McGrane remained with the team. Owing to the character of the country and general surface of the land Kroessin and Judd were only able to approach to within about half a mile of the hunters without being discovered, as the team, with its 2 attendants and sentinels had been left, accidentally, of course, on a high knoll. After witnessing the shots, Kroessin and Judd drove up and placed the outfit under arrest. The 24th of August complaint was made before Peter Finton, village justice of Alden, charging these 4 defendants with an attempt to kill one prairie chicken, at the time and place above referred to. They were arrested and arraigned the same day, pleaded not guilty, demanded a jury trial, and the case was accordingly tried the 27th of August. They employed 2 attorneys and fought the case stubbornly, but a jury of 12 representative men found F. W. Kahler and Thomas Clements guilty. Fink and McGrane, who had remained with the team, were released. August 30th, pursuant to adjournment, the defendants Kahler and Clements were again in court, to receive judgment. They were each sentenced to pay a fine of $20 and one-half the costs of prosecution, and in default of payment to be imprisoned in the county jail of this county for the term of 30 days, or until such fine and costs were paid. The costs alone amounted to $71.06. They refused to pay and were committed. The constable delivered them to the sheriff, who received them about 1 P. M. Kahler, however, was permitted to visit his invalid wife before going behind the bars and somehow lost his courage and concluded to appeal; although it was his declared intention to go to jail and seek a release by *habeas corpus* proceedings. Clements went to jail, but about 6 P. M. lost his courage and also appealed, rather than await the slow course of *habeas corpus* proceedings. The case is now pending in the district court.

This case has done more for game protection throughout this section than any case of its kind yet brought to my notice. The defendants received no comfort or consolation whatever from anyone outside their immediate friends, and the universal verdict is that it served them right. Kahler and Clements are saloon keepers and men of means, and the former had long been suspected of setting the game law at defiance. The case is unique in several respects, especially because the alleged offense was committed on land owned and occupied by the father of one of the parties, Mr. Fink, and because they were convicted of an attempt to violate the game law. At the request of the game warden and the county attorney I took charge of the case from the beginning, and in the end had the satisfaction of knowing that in this county, at least, the game laws can be enforced. I should have stated in the foregoing report that Warden Kroessin captured one gun, which was confiscated by the State Board of Game and Fish Commissioners, but he was unable to secure the dogs and other guns.

Taken all in all it was an expensive piece of sport, and no self-respecting person, having regard for his reputation and his purse, will care to duplicate it.

Henry N. Morgan, Rear Warden Albert Lee Chapter.

MICHIGAN.

I am enclosing a letter and a report from our State Department, which will give you an idea of the amount of work being done. As Mr. Morse says, sentiment in many localities has been so changed, thanks to RECREATION and the L. A. S., that a violation is almost sure to be followed by conviction. My work has been along these lines. I have used all the influence I have had to help the State Department. This is an already well organized machine, and I have let them have the credit for everything. They are entitled to it, but they know our organization will fight them, too quickly, if they don't do the right thing.

Through Mr. Morse I have secured the appointment of several L. A. S. men as deputy State wardens. Many of them are not known among their best friends to be wardens, and will not be so known until the right time comes. Then some violator will be made an example, and a moral lesson taught, which has a great influence in our cause. Our laws as they now stand can be enforced, and they consequently meet the approval of those who are employed to enforce them.

The first year I was a member of the League, the State game department had no use for us. I Overcame that feeling, thanks to you and RECREATION, and soon let the politicians know what we were after, and what we were going to get. We now work in perfect harmony and are accomplishing something. My aim has been to get good men appointed and then support them. In return I am consulted and know what is going on. They desire this support and give something in return for it.

We have good laws, great improvements over the old ones. We are enforcing them; we are educating people to help enforce them. The men we are especially after are the game hogs and market hunters, the worst class of violators in the world. With our markets on all protected game closed at all times, and the deer limit reduced to 3, transportation out of the State prohibited, open season shortened, spring shooting prohibited, we have, with the aid of the Lacey law, got the thing pretty well cinched.

RECREATION has done more to bring about this result in our State than all other elements, because it has moulded public opinion and made it possible for a few men to accomplish much. Violations are decreasing and the percentage of convictions to arrests is increasing.

J. Elmer Pratt, Chief Warden.

The letter enclosed by Mr. Pratt is as follows:

Co-operation of your order with State officers will certainly bring about better results than any other procedure, and since we have started along these lines the results are apparent. In many localities where 2 or 3 years ago it was impossible to get a conviction we now have the sentiment right, and violators are promptly dealt with. What is better, in these localities few violations occur.

I have pleasure in appending herewith the results for the year just closed, and in this connection I desire to say that I have had much valuable information from you and other members of L. A. S., which has resulted in running down some of the worst violators. I fully appreciate your efforts and sacrifices for game protection, and thoroughly concur with your ideas for co-operation.

Complaints investigated	1,774
Prosecutions begun	848
Convictions secured	634
Acquittals	20
Dismissals	50
Fines and costs imposed	$7,077.56
Prosecutions for violations game laws	318
Prosecutions for violations fish laws	529
Prosecutions for resisting a warden	1
Number of seizures reported	216

Seizures consisted of nets in illegal use, immature and contraband fish, which were disposed of as ordered by the court.

Grant M. Morse, State Warden.

UTAH.

Our State law for the protection of game, fish and song birds is now in fairly good shape, although not quite so good as it could be. Some good amendments and provisions were enacted by our State Legislature of 1901, chief of which is the abolishment of spring duck shooting, the open season now being October 1st to January 15th following, with a limit of 40 birds a day. This is not quite as it should be, but is much better than formerly, when one to 400 birds a day were killed by some so-called sportsmen and the market shooters. Elk, antelope and bighorn still have an unlimited close season, and the killing of deer is limited to 2 head, with open season October 15th to November 15th; but I am sorry to say that marketing and sale are still permitted, which should not be.

The selling or offering for sale of brook, rainbow, native mountain and grayling trouts, and landlocked salmon taken from any streams or waters of the State was abolished, and power given to the wardens and deputies to search, with or without warrant, for contraband fish or game. This gives these officers a chance to enforce the law.

The shipment of all kinds of game and game fishes out of the State is prohibited. Quails and all kinds of imported game birds still have a continuous close season, together with all kinds of song and insectivorous birds. The most important thing I could now wish in our fish and game law is the non-sale and traffic in our game birds and game animals.

The last Legislature made an annual appropriation of $2,000 for the enforcement of the fish and game laws, and there has been less transgression than formerly. There have been some arrests and convictions for violations of the game laws.

League matters of the State are being pushed by Mr. George Pugsley, who reports to me that the outlook is good, with a fair prospect of a largely increased membership. He has sent out a large quantity of League literature, and he thinks he will be able to increase the membership to 200 or more within the next few months. He is confident of securing as members and subscribers to the League, the members of all the gun clubs in the State, besides many other sportsmen who do not belong to any of the clubs.

John Sharp, Chief Warden.

WASHINGTON.

Within the past year I have made 3 arrests and secured 3 convictions for violations of the game laws. I stopped sawmill owners from throwing sawdust in the Yakima river, at Easton, Washington, and compelled the owners of the mill to put a fish ladder in their dam for the salmon to pass up to spawn. I have investigated many other reports, but could make nothing of them.

To-day the game warden and I worked up a case which resulted in the arrest and conviction of a market dealer. He was fined $10 and costs for selling quails.

I have the report of Mr. Frank A. Pontius, secretary-treasurer, Seattle, who states that King county has taken out 1,632 hunters' licenses, every refusal and hunting without being followed by arrest and conviction. Mr. Kelley, county game warden, also rear warden L. A. S., has 31 deputy county game wardens. There is no sale of game whatever in Seattle, not even ducks, although there is no law against the sale of the latter. The following are the deputy county wardens of King county: C. H. Pike, Cedar Mountain; W. E. Bowles, Black River; S. E. Likes, Fall City; John Hudson, Preston; N. J. Peterson, Peterson's Point, Lake Washington; Thos. J. Humes, Mayor of Seattle; Park McMicken, Seattle; H. B. Orr, Seattle; J. W. Ellis, Agent So. Pac. R. R., Seattle; H. W. Anderson, Reporter of Seattle Star; Frank A. Pontius, Seattle; C. B. Yardell, Reporter Seattle P. I.; David M. Barnes, Seattle; O. P. Bebee, Seattle; L. A. Daniels, Juanita; A. Springer, Seattle; E. B. Bushnell, Orilla; D. Murphy, New Castle; Joe Schlumpt, Traveling Deputy, Seattle; R. Thorn, Jr., Renton; E. B. White, Eumenclaw; S. A. Pelkie, Renton; Charles Nelson O'Brien, Seattle; E. A. Hartley, Columbia City; J. P. Morris, Franklin; J. F. Arnold, Maple Valley; W. F. Hains, Des Moines; J. O. Smith, York; T. H. Westmoreland, Issaquah; Wm. Belond, Seattle; E. H. Emsen, Kent.

As Mr. Kelley is our rear warden, I regard this as League work, notwithstanding the above are county game wardens, he having made the appointments.

F. S. Merrill, Chief Warden.

CONNECTICUT.

Most of the work done in this State during the past year has been in the way of securing better legislation for the protection of game, fish, and song birds. We have been successful along this line. We have succeeded in getting a closed season on all shore birds and web-footed water fowl from April 1st to August 31st inclusive, and have limited the number of snipe, plover, shore birds and rails killed at one time, by one person, to 50. This is a comprehensive and adequate law and practically stops spring shooting. We have stopped the sale of quails, woodcock and ruffed grouse for 2 years, and the transportation of these birds within the limits of this State, except when accompanied by the owner, is prohibited; also, transportation of same beyond the limits of the State. Only 5 ruffed grouse may be killed in one day and only 36 in one year by one person.

The taking or destroying of rabbits, between October 1st, 1901, and October 1st, 1905, with ferrets, is prohibited. We have placed a bounty of $1 on foxes. The trapping, netting, or snaring of game birds is prohibited.

Our new law prohibits the killing of all song birds and insectivorous birds in this State.

The laws in this State have been observed generally much better than heretofore. We have made one arrest. That was for hunting on Sunday, and the party was convicted and paid his fine.

Our League membership has increased this year. We are about to call a State meeting and we expect it to result in a further increase.

F. P. Sherwood, Chief Warden.

MONTANA.

During the past year we have had the first effective work on the part of the State in protecting game. At the last session of the Legislature a law was passed levying an assessment for the payment of the wardens. There are now a warden and 6 deputies in the State, and they are doing the best they can for the protection of game. It was due to the agitation made by the members of the League, aided by others, that this law was made. The law also provides for permanent protection to the antelope, as you know. That was also brought about largely by the influence of the League.

The members of the League are badly scattered, owing to the size of the State, and communication is difficult. I do not know how many convictions have been made, nor how many arrests. Not many of these are reported to me. I have not had half so many complaints in regard to violations of law as in former years.

The League has done great good in the State, and will do still more. The evidence is that game is increasing fast in the forest reserves, owing to the fact that the rangers are under instructions to see that the laws of the State are obeyed.

M. J. Elrod, Chief Warden.

IDAHO.

We have not secured, during the present year, any new laws for the protection of fish and game, although the Legislature passed a new and comprehensive bill, providing for a gun and rod license. It passed both bodies of the Legislature almost unanimously, but the Governor vetoed it, after the Legislature had adjourned. His veto of the bill did much good, as it aroused a great deal of sentiment, and will result in even a better bill at the next session, when I hope and expect to see a law enacted that will provide a license, and limit the number of birds and animals that may be killed, and the quantity of fish that may be taken.

The membership of the League has increased considerably in the past year, and many violations of law have been reported to me, through these members. I have made a number of arrests in the State during the past year, and more than half of the parties arrested were convicted and fined.

Many of our large notices, offering rewards for information that will lead to conviction for violation of the laws, have been posted in different parts of the State, and have done great good.

T. W. Bartley, Chief Warden.

MASSACHUSETTS.

There have not been many changes this year in the game laws. Absolute protection for the entire year has been extended to wild or passenger pigeons, gulls and terns, with the exception of the great American herring gull, or the great black backed gull, the close season on which is May 1st to November 1st.

The limit on trout is made 6 inches.

The most important move this year was the following: "Whoever willfully and without right pulls down or removes any portion of a stone wall or fence erected and maintained for enclosing land, shall be punished, etc." I secured this law for the purpose of protecting the farmers from the depredations of so-called sportsmen who pull down walls to secure game in hiding therein. This was brought forward to come closer to the farmer and to show him that the real sportsman was anxious to protect him from injury and annoyance; to create a bond of sympathy between them. Heman S. Fay, Chief Warden.

PENNSYLVANIA.

There has been much activity in this State in the way of game protection during the year past. Our last Legislature made few changes in our game laws. They already cover the subject of bird protection thoroughly. The fish laws were thoroughly gone over and revised during last April. Length of trout to be kept was changed from 5 inches to 6, sale or purchase prohibited, except of artificially bred and raised trout, and then only during open season and 6 days following (April 15 to July 31); number to be caught limited to 50 in one day. Open season for all other game fishes except lake or salmon trout was changed from June 1 and January 1 to June 15 and February 15; lake or salmon trout January 1 to September 1. No flagrant violations of the game laws have taken place in this section, for too close a watch has been kept. C. F. Emerson, Chief Warden.

ONTARIO.

In December last I gave Mr. A. E. Ruby, rear warden of Berlin chapter, instruction to prosecute 3 different parties who openly exposed and sold quails and ruffed grouse, in the market of Berlin, in the close season. Mr. Ruby secured a conviction in each of the 3 cases. These convictions have had a great and good effect on law breakers in that locality. I have caught several parties red handed in the act of violating the game laws. I have given them all a good, sharp reprimand, and all of them have promised me never again to violate the laws. In fact, I have their signatures to a paper to that effect, so they know the consequences if I ever get after them again. I expect to send in a number of applications for membership shortly.

C. A. Hammond, Chief Warden.

OHIO.

Our game laws, as now constituted, are ambiguous and full of loopholes. Convictions are hard to obtain. Considering these points, the fact that 178 convictions were obtained from 220 arrests for violations of game laws, and 140 arrests with 96 convictions for violations of fish laws, the fines aggregating $5,391.40, clearly shows vigilance on the part of our game wardens. By the time this reaches you our Legislature will be in session, and an effort will be made to simplify and make more effective our bird, game and fish laws.

Our membership in this State shows an increase of 30 per cent., a healthy growth.

W. E. Gleason, Chief Warden.

OKLAHOMA.

As far as I have heard there was no prosecution in Oklahoma in 1901 for violation of our game laws. There have been some indictments in the federal courts for violations of the Lacey Act. In one case, at Tecumseh, defendant pleaded guilty and was fined $550.

W. M. Grant, Chief Warden.

When the man who lived in the wretched log cabin with a family of 7 had told me that 40 acres of his land was a solid coal bed, I asked him if his deed was all right.

"Never had no deed, sah," he rather proudly replied.

"But you have no paper at all?"

"No paper 'tall, sah. I jest squatted down on this yere land 30 years ago, and hev been yere ever since."

"But if you have no paper won't the owner come along some day and bounce you out?"

"Not skassly, sah—not skassly. That is to say, sah, that the real owner has come along 3 different times and tried it, and every time he got killed and had to give it up. Deeds and sich things are all right 'nuff in their way, but my old gun, with a bar'l 7 feet long, is a heap better right around yere."—Washington Post.

I take great interest in reading Recreation, for there is more valuable information to be found in its pages than in any other sportsmen's journal published; and aside from information, I like the way you handle the hogs of all kinds. Recreation's influence will grow.

W L. Blinn, Rockford, Ill.

FORESTRY.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

THE TALE OF THE RINGS.

H. H. CHAPMAN.

Every tree has its life history securely locked in its heart. Each year of its growth a thin ring of wood is formed next to the bark, and a corresponding layer of bark adjoining it. As the tree swells and swells, the bark is forced outward, and splits into wide fissures. Much of it falls off altogether, but each ring of wood remains a faithful record of the year in which it was formed. When the ax or saw of the woodman ends the life of the tree and brings its body crashing to the earth, this record is unrolled before us, and by it we can determine almost every incident in the life and growth of the tree.

Trees, as well as human beings, have their period of struggle and hardship, their prosperous times, their terrible misfortunes and hairbreadth escapes, their injuries and recovery, and their complete submergence in a struggle in which the odds were too great for their feeble strength to cope with. Here is a sturdy oak whose tale revealed is that of steady perseverance in the face of difficulties; a slow, gradual growth, never checked, never daunted, till the final goal is reached, and it stands supreme, literally monarch of all it surveys. Here is a mighty spruce, which has a tale of perseverance, but of a different sort. The oak conquers by force of character, by its fighting qualities. The spruce succeeds by its ability to endure. It is like the patient Jew, frugal, living on what would be starvation to others, till when their day of strength is past, and sudden disaster overtakes them, he enters into his inheritance and prospers amazingly.

See the record of this spruce, 50, 60, 70 years, each represented by a ring so small that it takes great care to distinguish them at all, and the whole 70 do not occupy the space of 3 inches at the heart of the tree. What a tale of hardship this sets forth. Other trees have preempted the light on which the existence of a tree depends. The poor spruce must be content with the twilight that filters through the branches of its enemies, the poplar, birch, and pine. But it is content. It knows that if the young poplars or pines spring up beside it in the shade, they can not endure, but will quickly die. It knows that the time will come when old age or disease will weaken the poplars, or, perhaps, a heavy wind will lay them low, and the spruce, old in years, but insignificant in stature, will escape injury, and still young in vitality will soon spring ahead in the race. Now see its rings; it has made as much growth in 10 years as in the preceding 70 and soon becomes a large tree.

What does the stump of this old white pine teach us? Evidently something extraordinary has happened to it, for away in, near the heart, a black scar runs around the edge of one of the annual rings, for nearly one fourth of its circumference, and outside of this the rings are no longer complete, but have their edges turned in against the face of this scar. Each subsequent ring reaches farther across it. By the time they have met in the center many years have elapsed and there is a deep fissure where the scar once existed; but the later rings have bridged the gap and, growing thicker in the depression, soon fill the circumference of the tree to its natural roundness, leaving no sign of the old wound. What happened to the tree? While it was still young, its mortal enemy, the forest fire, swept through the woods, destroying most of its companions and burning a large strip of the tender bark on its exposed side, so that the bark died and fell off; but being better protected than the others, and having still ¾ of its bark left uninjured it soon recovered, and its stump reveals how successfully it strove to heal the wound and grow to maturity, to perpetuate its species.

As it takes many swallows to make the summer so it takes many trees to make a forest, and the forest has almost as much individuality as the tree itself. Though each tree and each species struggle with each other for life and supremacy, yet in a sense they are helpful to each other, and protect each other from their common enemies.

Chief enemies of the forest are the wind, and the fire. Other enemies there are, such as insects and disease, and sometimes the forest suffers so severely that its whole aspect is changed, and new species come in and replace the old. Much of this history the rings will reveal to us, as is the case in some of the following actual examples from studies recently made in the pine forests of Northern Minnesota.

In one locality where small Norway pines stood close together, making a thick stand, it was found that almost without exception the trees were of the same age, 138 years. No matter how large or how slender the tree, it was just as old as its neighbor.

The rings on all these trees were large at the heart, but as 50 or 60 years went by, they got narrower and narrower, until some of the smaller trees seemed hardly to grow at all. The reason was plain; there were too many trees, and as none would give up the struggle, all suffered alike.

They were not the only sufferers. Here and there was a slender, struggling white pine, making a vain attempt to capture its share of sun and rain. Counting reveals that these white pines are also all of the same age, but, unfortunately, only 126 years old. The Norways had 12 years the start of them, and the delay was fatal.

How did it happen that these trees came in so thickly and all the same year? Perhaps further study will help us to find out. We go to another cutting, over a mile from the first. Here we find many trees, about the size of those we have left, and counting the rings, we find them to be the same age, 138 years. But here is something more. In a secluded nook stands a group of immense white and Norway trees, perhaps a dozen. These prove to be very old, but also of even age; each stump showing 315 rings. Where is the rest of this patriarchal forest? Close about the few remaining may be seen the forms of many more, stretched upon the ground and slowly decaying. These have evidently been blown down, possibly after being killed by fire. Their fate gives us the clue to the disappearance of the others. It is plain that some time before 1763, a great disaster overtook the pine forest in this place. Most of it was wiped out of existence, either by fire or wind. But here and there a clump remains, and from them in a favorable seed year came the seed which started the new and thriving crop of Norway pine.

To find out, if possible, whether this conflagration or blowdown was more than local, we go to a cutting some 10 miles from our first, and there again the oldest and largest of the stand, which is all rather small, prove to be 138 years old. Whatever the cause, it must have operated over a large area, but this is not a thick stand; in fact, there are many gaps, and much of the timber is limby and knotty, a sure sign that it has not been grown close together. Soon we find that many, in fact most, of the trees are but 101 years old, there being 2 distinct age classes.

How did this come about? Let us look at the older trees. On one of them is a fire scar, made when the tree was 18 years of age. On another we find a similar scar, made in the same year; and on close examination we can hardly find one of the older trees free from the marks of this fire. How plain it is, that this fire, occuring just 120 years ago, or in the year 1781, when the young forest was 18 years of age, killed nearly all the young pine and gave the forest a blow from which, in this place at least, it never fully recovered. It did the best it could, however, for the age of the second class of trees, 101 years, shows that the young survivors of the fire grew rapidly until at the age of 38 years they were enabled to produce a crop of seeds; or, possibly, the old trees from which the first ones came were still living and seeded down the ground a second time, so that a fairly good stand of trees was finally produced.

These studies lead us to infer that pines reproduce themselves as forests generally under exceptional or unusual circumstances, and that it is their natural way of maintaining themselves as species. The young white and Norway pine, especially the latter, can not endure much shade when small, and could not possibly grow up as a dense forest under their own shade or the shade of other trees; yet, we nearly always find them in dense groves. The rings tell us the secret. In the long period of 200 to 300 years during which the pines live, the accident of fire or wind becomes a certainty, and when a strip of forest is laid low or burned, the neighboring trees stand ready to scatter the seed far and wide in the wind, and the new growth springs up and flourishes.

This is nature's method; but nature's methods are so perfectly harmonized that but little is needed to throw them out of balance. Nature clears in strips and dashes seed there, and fires are rare and far apart. Man clears over wide areas and fires of his origin sweep repeatedly over his slashings. The young pine spring up even after the second and third fires, but by perseverance the fires finally destroy them all, and what nature intended to be the young pine forest becomes a barren wilderness.

ADIRONDACK FOREST PRESERVE.

New York City.

Editor Recreation:

A bill is about to be introduced in Albany to sanction the cutting of conifers in the Adirondack Preserve, and forbidding the cutting of hard woods. This removal of the evergreens would be most destructive to game. It is the hard woods that should be removed. The supply of game in a region depends largely on the abundance of food;

the nature of the country, forest, brush, plain, etc., the protection it affords, and the extent to which man may interfere. The removal of the coniferous growth and in course of time the reversion to hard woods will greatly affect all these conditions.

Deer and ruffed grouse are the principal game of the Adirondack woods.

Conifers and hard woods, while the latter are in leaf, offer this game essentially the same shelter; but at this warm season the game needs little protection from natural dangers. It is when the snow covers the ground that shelter is needed.

Where does the ruffed grouse go in the blizzard; where, when the Norther blows? Does he roost on a bare maple limb?

Where do the deer lie when the snow is deep? Under the yellow birch, or the heavy-crowned spruce sapling? Where do the deer yard? On a hard wood ridge, or in the spruce swamp?

The ease with which game can be killed affects its plentifulness. If Tom, Dick and Harry could kill a deer every time they wished, how many would remain?

Why do you like best to hunt ruffed grouse and deer after the leaves have fallen? You can see better, you can shoot farther.

The abundance of food determines the size and fecundity of the animal. Not a feast and a famine diet is desirable, but a good food supply all the year round. The question of food during the late spring, the summer and the fall is of minor importance.

All the game in the Adirondacks could thrive on 100,000 acres during that period. The supply of game that an area will support is dependent on the amount of food available during the worst season, the winter. We must consider, therefore, the effects of the removal of the evergreens on the winter's food supply.

The food of the deer from November to April is arbor vitæ, hemlock, balsam, mosses and lichens, buds and twigs of witch hazel, dogwood, mountain maple and other shrubs. The extent to which evergreens enter into the diet is shown by the fact that venison late winter killed is tainted by them and of little value.

The ruffed grouse, during the winter in the Adirondacks, live on the buds, leaves and seeds of the pines, spruce, balsams, tamaracks and poplars.

The great hard wood region of the Appalachians, many times the size of the Adirondacks and as wild and often wilder, now has few deer. In early times they were extremely plentiful. In former times when the snow came the game went to the warm, low valleys now occupied by farms and villages. Now they must winter in the high altitudes where they summer. It has become a hard-wood country, and food is absent. As we come North into Pennsylvania, New York and Maine, and the percentage of coniferous growth increases; so do the deer.

PECAN NUTS.

Botanically the pecan, *Hicoria pecan,* belongs to the hickory family. The tree is one of the largest of the forest, growing 75 to 170 feet high, with wide spreading branches and symmetrical top. In appearance the tree resembles somewhat closely the ordinary hickory nut. The nuts are generally oblong and vary in weight from 25 to over 100 a pound. The shells are relatively thin and much more easily cracked than those of the common hickory nut, and are dark colored and fairly smooth. The nuts are usually polished before marketing. Some fancy and high-priced varieties are not polished, but sold in their natural condition.

The pecan is found native in river bottoms from Iowa and Kentucky, Southwest into Mexico. It is successfully grown in many other States. Generally, however, pecans will not be commercially successful North of parallel 40. Pecan nuts are grown on a commercial scale in California, and orchards have been planted in a number of Southern States. Texas and Louisiana at present furnish the main bulk of the annual crop, mostly from native trees.

Pecans may be propagated from seed. They are liable to considerable variation, however, and budding and grafting are therefore resorted to in propagating desirable sorts.

By selection and cultivation a number of varieties of pecans have been originated which are great improvements over the native sorts. The points to be considered in estimating the value of pecans are quality and flavor, plumpness of kernel, ease with which the kernel separates, size, and the thickness of the shell. A thin-shell variety, other factors being equal, is most desirable. Stuart, Van Deman, Centennial, and Frotcher are considered standard sorts.

Pecan trees may bear a few nuts at an early age, but paying crops can not be expected under 10 years, and full crops under 20. The annual crop of a tree in full bearing has been variously reported as 1 to 20 bushels.

Like most nuts, pecans contain a large quantity of fat or oils, fairly large quantities of nitrogenous material, and little carbohydrates. They are used principally as table nuts and in the making of cakes and confectionery or similar foods. The meats are also frequently salted.

PURE AND IMPURE FOOD.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

THE WAY TO BOIL MEAT.

If, in cooking, meat is placed in water cold at the start, part of the organic salts, the soluble albumen and the extractives, or flavoring matters, will be dissolved out. A little lactic acid will be formed, which acts on the meat and changes some of the insoluble matters into materials which may be dissolved out. The extent of this action and the total quantity of materials which actually go into the solution depend on 3 things: the extent of surface exposed to the water, the temperature of the water, and the length of time of the exposure. Small pieces of meat, long continued cooking and very hot water all result in rich broth and tasteless meat. If the water is heated gradually, more and more of the soluble materials are dissolved. At a temperature of about 134 degrees Fahr. the soluble albumen will begin to coagulate. At 160 degrees Fahr. the dissolved albumen will rise as a brownish scum to the top and the liquid will become clear. Upon heating still higher, the connective tissues begin to change into gelatin and are partly dissolved out; while the insoluble albuminoids are coagulated. The longer the action of the hot water continues, the tougher and more tasteless the meat becomes, but the better the broth. Treated in this way, flesh may lose over 40 per cent. by weight. This loss is principally water, but 5 to 8 per cent. may be made up of the soluble albumen, gelatin, mineral matters, organic acids, muscle sugar, and flavoring materials. Part of the melted fat also goes into the broth.

It would be a great mistake to assume that meat, thus boiled, which is nearly a tasteless mass of fibers left undissolved by the water, has no nutritive value. The tasteless material has been found to be as easily and completely digested as the same weight of ordinary roast. It contains nearly all the protein of the meat, and, if it is properly combined with vegetables, salt, and flavoring materials, makes an agreeable as well as nutritive food.

If a piece of meat is plunged into boiling water or very hot fat, the albumen on the entire surface of the meat is quickly coagulated, and the enveloping crust thus formed resists the dissolving action of water and prevents the escape of the juices and flavoring matters. The meat retains most of its flavoring matters, and has the desired meaty taste. The resulting broth is correspondingly weak.

The foregoing statements will be of much help in the rational cooking of meats in water. The treatment depends largely on what it is desired to do. It is impossible to make a rich broth and have a juicy, highly flavored piece of boiled meat at the same time. If the meat, only, is to be used, the cooking in water should be as follows: Plunge the cut at once into a generous supply of boiling water and keep the water at the boiling point, or as near boiling as possible, for 10 minutes, in order to coagulate the albumen and seal the pores of the meat. The coating thus formed will prevent the solvent action of the water and the escape of the soluble albumen and juices from the inner portions of the meat. But if the action of the boiling water should be continued, the whole interior of the meat would, in time be brought near the temperature of boiling water, and all the albumen would be coagulated and rendered hard. Instead of keeping the water at the boiling point, 212 degrees Fahr., therefore, the temperature should be allowed to fall to about 180 degrees Fahr., when the meat could be thoroughly cooked without becoming hard. A longer time will be required for cooking meat in this way, but the albumen will not be firmly coagulated and the flesh will be tender and juicy instead of tough and dry, as will be the case when the water is kept boiling, or nearly boiling, during the entire time of cooking.

In boiling delicate fish, as salmon or halibut, the plunging into boiling water is objectionable because the motion of the boiling water tends to break the fish into small pieces. Fish should be first put into water that is on the point of boiling. The water should be kept at this temperature a few minutes and then allowed to fall to 180 deg., as in the case of meats. Fish may be conveniently boiled in a fish basket made for the purpose.

If both the broth and the meat are to be used, the process of cooking should be quite different from that outlined for boiling meat. Stewing is in this country a much undervalued method of cooking. This is due partly to the fact that stewing is generally improperly done, and partly to the general aversion which, consciously or unconsciously, Americans have to made dishes of any kind. This aversion probably has its origin in a false notion which spurns economy or any attempt at economy in the diet.

In stewing, the meat should be cut into small pieces, so as to present relatively as large a surface as possible, and, instead of being quickly plunged into hot water, should be put into cold water in order that much of the juices and flavoring materials may be dissolved. The temperature should then be slowly raised until it reaches about 180 degrees Fahr., where it should be kept for some hours. Treated in this way, the broth will be rich and the meat still tender and juicy.

If the water is made much hotter than 180 degrees Fahr., the meat will be dry and fibrous. It is true that if a high temperature is maintained long enough the connective tissues will be changed to gelatin and partly dissolved away, and the meat will apparently be so tender that if touched with a fork it will fall to pieces. It will be discovered, however, that no matter how easily the fibers come apart, they offer considerable resistance to mastication. The albumen and fibrin have become thoroughly coagulated, and while the fibers have separated from each other, the prolonged boiling has only made them individually dryer and firmer.

The quantities of the ingredients in a meat broth may be illustrated by a German experiment. One pound of beef and 7 ounces of veal bones gave about a pint of strong broth or soup, which contained, by weight, water, 95.2; protein, 1.2 per cent.; fat, 1.5 per cent.; extractives, 1.8 per cent.; mineral matters, 0.3 per cent.

Palatable broths can be made by using more water and adding vegetables or savory herbs. Broths thus made have, of course, a greater quantity of water, frequently as much as 98 per cent., or even more; and the nutrients are correspondingly reduced in quantity. It would appear from the analysis given above that the quantity of solids in broth is generally small; consequently, their strong taste and stimulating effect on the nervous system must be ascribed to the meat bases, or flavoring matters, and to the salts of potash which they contain. Besides meat bases, soups contain more or less gelatin, varying directly with the quantity of bones used in the preparation.

The term meat extract is commonly applied to a large number of preparations of different character. They may be conveniently divided into 3 classes, namely, true meat extracts; meat juice obtained by pressure and preserved, compounds which contain dried pulverized meat, and similar preparations; and albumose or peptose preparations, commonly called predigested foods.

The true meat extract, if pure, contains little else besides the flavoring matters of the meat from which it is prepared, together with such mineral salts as may be dissolved out. It should contain no gelatin or fat, and can not, from the way in which it is made, contain any albumen. It is, therefore, not a food at all, but a stimulant, and should be classed with tea, coffee and other allied substances. It should never be administered to the sick except as directed by competent medical advice. Its strong meaty taste is deceptive, and persons depending on it alone for food would certainly die of starvation. Such meat extracts are often found useful in the kitchen for flavoring soups, sauces, etc. Broths and beef tea as prepared ordinarily in the household contain more or less protein, gelatin and fat, and, therefore, are foods as well as stimulants. The proportion of water in such compounds is always large.

The preserved meat juice and similar preparations contain more or less protein, and therefore have some value as food.

The third class of preparations is comparatively new. The better ones are really what they claim to be—predigested foods. They contain the soluble albumoses (peptoses), etc., which are obtained from meat by artificial digestion. The use of such preparations should be regulated by competent medical advice.

The principal difference between roasting and boiling is in the medium in which meat is cooked. In boiling, the flesh to be cooked is surrounded by boiling water; in roasting, by hot air, although in roasting proper much of the heat comes to the joint as radiant heat. In both cases, if properly conducted, the fibers of the meats are cooked in their own juices.

When the meat alone is to be eaten, either roasting, broiling, or frying in deep fat is, when properly done, a more rational method than boiling, for the juices are largely saved. The shrinkage in a roast of meat during cooking is chiefly due to a loss of water by evaporation. At the same time small quantities of carbon and nitrogen are driven off and a little acid is produced which dissolves some of the constituents of the meat. The fat undergoes a partial cleavage into fatty acids and glycerin, and a little of it is volatilized .

YEAST AND OTHER LEAVEN.

When, in beer making, a little yeast is put into a vat of warm, sweet liquid, bubbles gradually appear until the whole mass seems to be boiling. If the liquid is analyzed after the yeast has so worked in it for a time, it will be found to contain less sugar than at first; the amount of yeast will have increased and alcohol and carbon dioxid will appear in considerable quantities. The explanation, as given in a recent bulletin of the Department of Agriculture, is this: The yeast, which is really a mass of tiny plants, has reproduced again and again, and in this growth has fed on the sugar of the liquid and given off alcohol and carbon dioxid. This phenomenon is called alcoholic fermentation, and is essentially the same as that which "raises" a loaf of bread. Such fermentation is by no means the only kind which occurs in common life. The souring of cider into vinegar, for instance, is due to another kind. In that case a variety of microscopic plant develops in the cider, and in so doing produces acetic acid, which gives vinegar its characteristic taste. This is called acetic fermentation. Similarly, if another variety of bacteria get a chance to develop in sweet milk, they give rise to lactic fermentation, during which is produced the lactic acid which turns the milk sour. Rancidity of butter is due to the so-called butyric fermentation. Here the bacteria yield butyric acid, which gives the butter its disagreeable taste and odor.

These microscopic plants and many others are widely distributed in the air, and often find their way accidentally into different materials, where they grow and multiply, causing fermentation; just as thistle seeds, for instance, are blown about in the air until they lodge in some favorable spot and grow. At other times special forms of ferments in so-called "pure cultures" are purposely added to some material, just as seeds of larger plants are purposely sown in the garden. Thus pure cultures of certain microscopic organisms are added to cream to improve the flavor of butter and make it uniform in quality. This insures a special fermentation instead of the accidental fermentation which would otherwise occur.

It is a peculiar feature of fermentation that the microscopic plants which cause it affect a much larger quantity of the material on which they feed than goes to their own development. Thus yeast converts much more sugar into alcohol and carbon dioxid than it consumes in its own growth and reproduction. When the fermentation ceases, the yeast plant remains; in other words, the fermentation has been produced without changing the nature of the agent producing it. In the same way enzyms (chemical bodies which also cause fermentation) bring about the change without being themselves changed. Though so much has been learned in recent years concerning fermentation, there still remain many things to be explained. We know what changes take place and under what conditions, but just why they take place is not clear. It is a remarkable fact concerning ferments that the substances they produce, in time, put a stop to their activity. Thus the alcohol produced by the yeast, in time, is sufficient to hinder the growth of the yeast plant and ultimately to kill it. If the products of this activity are removed, the ferments resume work.

Keeping the above facts in mind, it is easy to understand the leavening effect of yeast in dough. The yeast, "working" in the warm water and flour, feeds on sugar originally present or else produced from the starch by diastase, grows and spreads throughout the dough, at the same time giving off carbon dioxid gas, which forces its way between the tenacious particles of gluten and lightens the dough.

Scientifically speaking, yeast is a minute fungus of the genus *saccharomyces.* A single plant is a round or oval one-celled, microscopic body which reproduces in 2 ways: either by sending out buds which break off as new plants, or by forming spores which will grow into new plants. It grows only in the presence of moisture, heat, and nutritive material.

Yeast is literally as old as the hills. Like mold spores and other micro-organisms, it must be present in the atmosphere, for if a dish of malt extract, originally free from yeast, be exposed to the air, alcoholic fermentation, such as could be produced only by yeast, will soon set in. Such yeast is known as "wild yeast," and all our yeasts have been cultivated from it.

A piece of dough containing yeast is called "leaven." Raising bread with leaven is still carried on in some regions of Europe. Wet, or potato, yeast, so common in this country before the days of patent yeast, was made by cultivating wild yeast or yeast obtained from a baker or elsewhere in a decoction of hops or potato and water. Some of the material thus obtained was mixed with the dough. The "barms" so much used in Scotland are made by letting yeast grow in malt extract and flour. Brewers' and distillers' yeasts are taken from the vats in which malt extract has been fermenting. Compressed yeasts are made by growing yeast plants in some sweet liquid, then drying the material to check their growth, and pressing it. Sometimes a little starch is added to make the little cakes keep their shape. The strength of any yeast depends on the care with which it is made and preserved. Ordinary brewers' yeasts are likely to be full of the bacteria which set up lactic or other fermentations in the bread and give it a disagreeable odor and taste. They are very susceptible to changes in the weather, and can not be always relied on. Compressed yeasts, if carefully made, are more uniform in strength and composition. Usually a few bacteria other than yeast are allowed to remain, as the acid taste they give the bread is considered an advantage.

PUBLISHER'S NOTES.

HOW THE PAGE FENCE BUSINESS GROWS

Under date of March 20th the Page Fence Co., Adrian, Mich., writes:

> "Our agents and customers will be interested to know that we have added 41 new looms to our weaving plant within the last year, and are completing 30 more as fast as possible. With this largely increased capacity for weaving, we hope to do this season what we have so far never been able to do in any past season—that is, supply the spring's demand for Page Fence.
>
> "This increase in the number of looms, taken in connection with the fact that all our looms have been running night and day every week, excepting 2, for the last 13 months, will afford some idea of the amount of Page Fencing we are called on to supply.
>
> "Before the end of March, 1902, we shall be drawing and galvanizing fully 200 tons of wire a day, and our Monessen Mills have been greatly enlarged in order to keep pace with the marvelous increase in our business."

The Page Fence is advertised in every issue of RECREATION.

Moral: If you want to build up your business advertise it in this magazine.

I beg to remind my readers, once more, of the importance of mentioning RECREATION when answering ads. I called on an advertiser the other day and he had on his desk a report from his check clerk of 10 inquiries for catalogues received that morning, only 2 of which mentioned any publication. The advertiser said that no doubt all of the 10 people who had written these inquiries had seen his ad in some paper or magazine, but the fact that 8 of them had neglected to state where they saw it made it impossible for him to credit any publisher with these inquiries. Suppose 8 people should write that advertiser each day, asking for catalogues, and failing to mention where they saw the advertisement. This would mean 2,920 inquiries in a year. Advertisers value RECREATION by the number of inquiries they get, mentioning it, and not by the number they get which do not mention it. Please remember it takes but a second of your time to add a postscript to your letter, saying "I saw it in RECREATION." Will you not kindly do this in future?

The Century Camera Company, Rochester, N. Y., is making some fine goods. I spent an hour very pleasantly the other day looking over some of these. The Century people are giving special attention to the wants of sportsmen, and are building several machines adapted specially to their wants. One of these is a long focus camera, which is adapted to the use of a telephoto lens, and which has several new and valuable features that I have never before seen attached to any camera.

The company has just issued a new catalogue, which describes these and many other goods made by this house. The book, which is especially complete in the matter of descriptive text, is beautifully illustrated. I advise all amateur photographers who are interested in outdoor work to write for a copy of it. In doing so do not forget to say you saw it mentioned in RECREATION.

The King Folding Boat Co., Kalamazoo, Mich., furnishes another instance of the successful advertiser. In the first place, these people make a thoroughly safe, reliable and smooth-working folding canvas boat. In the second place, they treat their customers fairly and courteously. In the third place, they use RECREATION liberally in making these boats known to the best sportsmen of the country. The King people started in RECREATION about 4 years ago, with one-eighth page of space. After a time they increased this to one-quarter page, and have now jumped to a full page for this, and a few subsequent issues. Then, for the remainder of the season they will use half pages.

Mr. W. C. Winans, manager of the King Folding Boat Co., writes me that their business has grown so rapidly during the past 2 years that they feel justified in branching out in this way, and in pushing the business vigorously. It pays to advertise liberally when you put it in the right place.

The Lake Park region of Minnesota is noted for its beautiful lake scenery and its fine fishing. This land was once covered by glaciers and from the débris of the glaciers came the present configuration of the country.

With the absorption, by the Northern Pacific, of the St. Paul & Duluth Railroad, this company obtained not only the short line between St. Paul and Minneapolis and Duluth and West Superior, but many additional fishing and scenic resorts in the

Lake Park region and St. Croix river valley, convenient to the cities named.

The chapter on The Moraine of the Glacier, in Wonderland for 1902, describes at length the beauties and characteristics of the region, and its advantages as a fishing and summer resort land.

You can get a copy of this beautiful book by writing Chas. S. Fee, G. P. A., St. Paul, Minn., and sending 6 cents. Please mention RECREATION.

Sportsmen and naturalists should know the good qualities of the Goerz binocular field glass. It is a powerful instrument, and is invaluable to any hunter or any person who desires to study wild animals or birds in their natural environment. It is no exaggeration to say that with one of these glasses you can clearly distinguish the eye and every feather of a sparrow at a distance of 50 yards. You can distinguish the eye, the hair and the horns of a deer at 200 yards with one of these glasses. You can see a 22 caliber bullet hole in a piece of white paper at 200 yards. When you realize the power of one of tnese glasses and the great value it is in hunting or studying wild animals, you will agree with me that no person interested in outdoor life can afford to be without one. Read the ad of C. P. Goerz & Son in this issue of RECREATION, and answer it. Do not forget to say where you saw it.

There is always great satisfaction in ordering goods from a house that you know will follow your instructions faithfully, and give you what you want. You can always rest assured of receiving such treatment at the hands of Wm. Mills & Sons, fishing tackle dealers, 21 Park Place, New York. This house was established in 1822, and among the thousands of customers who do business. In due time you will get the scarcely find a man who would not swear by them. Therefore, if you are in need of anything in the way of fishing tackle, fishing clothing. or related lines send in your order to Mills & Son, and go about your buisness. In due time you will get the goods, and they will be just what the doctor prescribed.

The Rochester Lens Company, Rochester, N. Y., is making a series of lenses that are equal to many of the high-priced goods produced in Europe. I was really surprised on going into their office and looking over some of their product. For instance, they make a 4x5 lens that sells as high as $150. It is not really necessary to pay such a price in order to get a good lens, but you can get just as good a one from this firm as you are willing to pay for. They issue a complete and exhaustive catalogue. If Interested in lenses please write for it and say you saw it mentioned in RECREATION.

Amateur photographers will be interested in the fact that Messrs. Charles I. Berg, Henry Troth and Rudolph Eickemeyer, Jr., have consented to act as judges in the Kodak Progress Competition. These men stand at the front of photography, and the best photographers may feel perfect confidence in their ability to pass judgment on the pictures submitted. The Eastman people may well feel gratified at being able to secure such capable men to do this important work.

E. S. Applegate & Co., of Trenton, N. J., have moved from their old stand to new and larger quarters at 209 East State St., opposite the postoffice, where they carry a full line of guns, ammunition, fishing tackle, camp equippage, and in fact almost everything a sportsman needs, when shooting, fishing or camping. Applegate & Co. publish a complete catalogue of sportsmen's goods, which they will send free to any one asking for it and mentioning this notice.

Every angler in the country should write Wm. Shakespeare, Jr., Kalamazoo, Mich., for a copy of his booklets, entitled, "Fine Points About Tackle," "The Art of Bait Casting," "How to Win," and "How to Catch Bass." These are all beautiful books from an artistic standpoint, and are full of valuable information. Any fisherman will be well rewarded for the time spent in reading them. In asking for them please mention RECREATION.

New Britain, Conn.

Mr. Henry L. Jespersen, New York.

My Dear Sir: Please send me a copy of your catalogue. I want some photo. supplies and remembering your favors to me when you were with the old firm, I should like to continue with you. Yours truly,
E. H Davison.

Washington, Sr.—But, George, why did you cut down the cherry tree?

Washington, Jr.—Well, I had to distinguish myself somehow, and there weren't any mountain lions around to shoot.—Life.

ALL FARMERS SHOULD BE GAME PROTECTORS.

One of the greatest opportunities for effective work in the interest of game protection is in educating the farmers of this country. If I could only reach a large percentage of these good people, if I could only afford to print 1,000,000 extra copies of Recreation each month and mail them to farmers, we should soon have them all on our side. I would then run a series of practical talks to farmers as to the need of protecting the game on their lands, of feeding the birds during the winter months. If we could only convince each farmer that a covey of quails is worth 10 times as much to him alive as it is dead, we would then have him on our side. Any large landowner can sell shooting privileges at a liberal price per acre if he has plenty of game. Not only this, but there are thousands of sportsmen who, after buying the shooting privileges on a farm, would pay the farmer's boy liberally to go with them over the fields and through the covers to find the birds. Furthermore, the sportsman would board with the farmer and buy feed for his team. Thus the game would become a valuable asset to the farmer.

Not one sportsman in 100 who went after the birds would kill any large number per day. Any reasonable man would be satisfied with half a dozen birds for a day's shooting. If the birds were properly guarded and the shooting privileges limited to a few, there would be a fair number of each covey of quails left at the close of each hunting season to breed. Then by putting out a small quantity of feed during the winter; by leaving a few shocks of corn, or rye, or oats, with openings in them, where the birds could find shelter, and by leaving out a small patch of standing grain, the birds would rendezvous about the fields, or even about the house and barn.

There are a few farmers in every State who have learned the value of live game, and who are leasing their shooting privileges as outlined above, and they find that, to reverse an old adage, a bird in the bush is worth 2 in the hand. There are other farmers who continue to kill or trap and sell all the birds they can find, or who allow their boys to do so. These latter are the men we should reach.

As I have frequently said, one of the greatest opportunities that exists for effective work on the part of the gun clubs or individual sportsmen is in having Recreation sent to farmers who are known to have quails or other game birds on their lands. If the brethren would only take up this line of work systematically and earnestly, they would find that in nearly every instance they would make a game protectionist of each farmer to whom they might send this magazine.

I am prepared to make a liberal discount on clubs of twenty-five or more copies of Recreation to go to farmers. Think this over, brethren, and let me hear from you.

A POST CHECK.

Congress is attempting to perfect a design for currency intended especially for transmission through the mails, and the active people of the country wish it success. The committees on post-offices and post-roads have before them a measure providing a Post check in denominations of $5 and under, down to the denominations of fractional currency. It is proposed to retire the $5, $2 and $1 dollar bills now issued by the Government and substitute the Post check, and make the latter the regular paper money for those denominations. The Post check was devised by Mr. C. W. Post, a prominent and public-spirited citizen of Battle Creek, Mich. He was assisted in its perfection by a number of publishers, and the plan has been earnestly endorsed by the American Newspaper Publishers' Association.

The general appearance of the Post check is that of the present $1 or $2 bill. On one side are blank lines on which the holder may write the name and address of anyone to whom he desires to make payment by mail. The payee, on receipt of the money, attaches his signature and collects the money at the office named. To forge the signature of the payee is a penitentiary offense, same as counterfeiting. As rapidly as the signed bills come into the possession of postmasters they are sent to Washington for redemption. By this process, one can carry about his person paper money in various denominations under $5, and it passes as good as gold. Should he desire to make remittance by mail he simply takes out a bill or piece of fractional currency, writes the name of his creditor, affixes and cancels a stamp, and it only requires the signature of the latter to again make the money as good as gold at the office named.

Since the adoption of rural mail delivery, farmers will be greatly interested in this proposition, and they would do well to so express themselves to their Senators and Representatives in Congress. The design has been dedicated to the Government, so that no individual can selfishly profit by the adoption of the Post check.

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Pure Seven-Year-Old Rye,

4 FULL QUARTS $3.20

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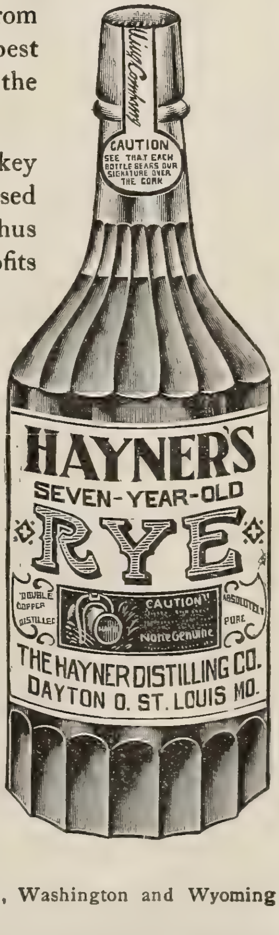

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SEVEN-YEAR-OLD
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ABSOLUTELY PURE
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When You Buy Hayner Whiskey you get direct from the maker the best whiskey that one of the largest and most completely equipped distilleries in the country can produce, after an experience of 36 years of continuous success.

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When You Buy Hayner Whiskey you get at practically first cost a whiskey that has no superior at any price, and is regularly supplied by us to nearly a quarter of a million satisfied customers, convincing evidence that our whiskey pleases.

Our Offer *We will ship you by express, charges prepaid, four full quarts of* HAYNER'S SEVEN-YEAR-OLD RYE *for $3.20. If you don't find it all right after trying it, send it back at our expense and your $3.20 will be promptly refunded. Shipment made in a plain sealed case; no marks of any kind to indicate contents.* WRITE OUR NEAREST OFFICE.

THE HAYNER DISTILLING COMPANY,

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Orders for Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming must call for **20 quarts** for **$16.00** by **freight prepaid.**

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The *Snappa* magazine carries 12 plates or 24 films which change instantly with a motion of the hand. The same hand that makes the exposure changes the plate like this.

Snappa

The marvel camera of the age. An invention surpassing all photographic instruments in accuracy, rapidity and ease of operation. Loads in daylight and is always ready for instant use. Every exposure is separate and can be developed independently. Uses either plates or films with equal facility. *Snappa* represents the last step in camera perfection—marks a mighty stride in the art of picture making. Ask the dealer to show you how it operates, or send for the *Snappa* book—FREE.

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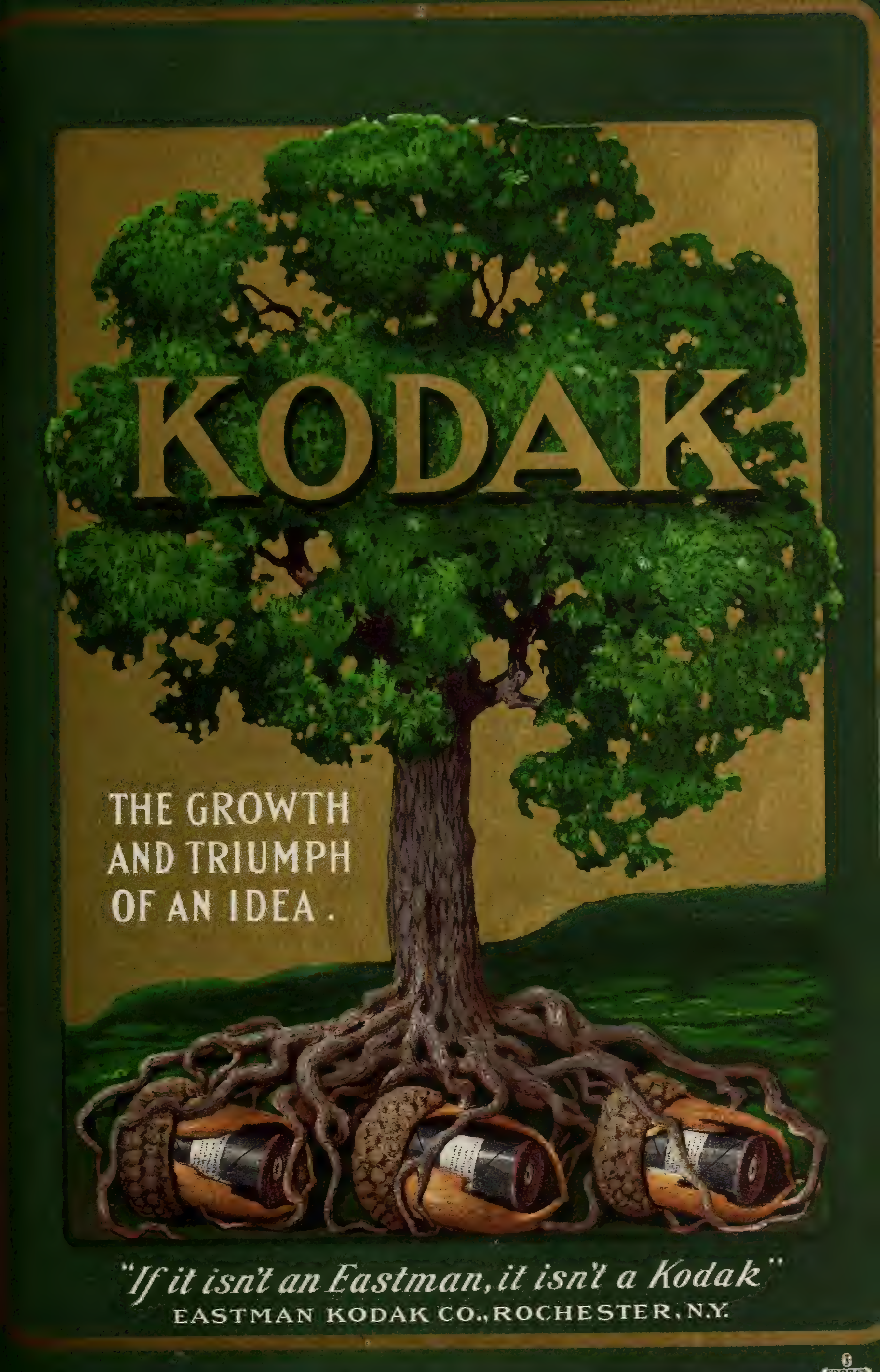
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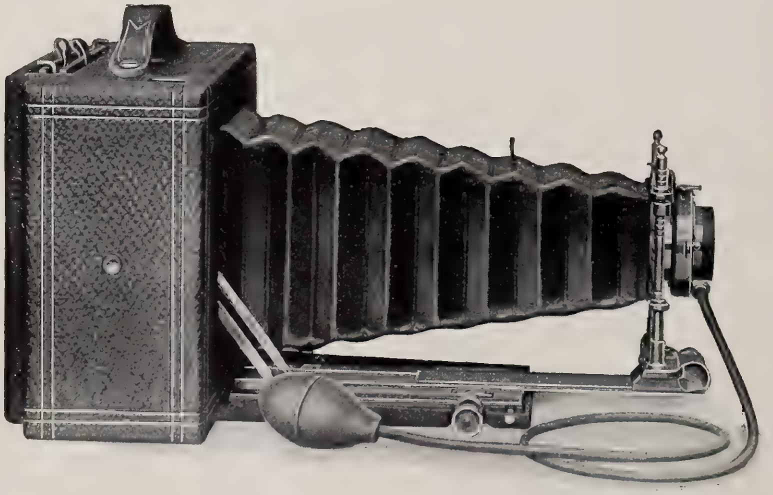
Superb Rectilinear lenses, Pneumatic release triple-action shutters, with iris diaphragms. Rising, falling and sliding fronts, extra extension bellows. Two brilliant finders, two sockets for tripod screws and focusing scale. Perfect in design and beautiful in finish.

The Cartridge Kodaks load in daylight with film cartridges for two, four, six or twelve exposures, or by means of an adapter may be used with glass plates and focused on the ground glass.



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$4000.00 in Prizes for the Best Kodak and Brownie Pictures.

AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

7th ANNUAL COMPETITION.

RECREATION has conducted 6 amateur photographic competitions, all of which have been eminently successful. The 7th opened April 1st, 1902, and will close November 30th, 1902.

Following is a list of prizes to be awarded:

First prize: A Long Focus Korona Camera 5 x 7, made by the Gundlach Optical Co., Rochester, N. Y., fitted with a Turner-Reich Anastigmat Lens, and listed at $85.

Second prize: A No. 3 Folding Pocket Kodak, made by the Eastman Kodak Co., Rochester, N. Y., fitted with a Bausch & Lomb Lens Plastigmat Unicum Shutter, and listed at $61.50.

Third prize: An Al-Vista-Panoramic Camera, made by the Multiscope and Film Co., Burlington, Wis., and listed at $40.

Fourth prize: A Wizard C Camera, 4 x 5, made by the Manhattan Optical Co., Cresskill, N. J., with B. & L. Iris Diaphragm and Leather Carrying Case; listed at $33.

Fifth prize: A Waterproof Wall Tent, 12 x 16, made by D. T. Abercrombie & Co., New York, and Listed at $32.

Sixth prize: A Gold Hunting Case Watch; listed at $50.

Seventh prize: A Tourist Hawkeye Camera, 4 x 5, and made by the Blair Camera Co., Rochester, N. Y., and listed at $15.

Eighth prize: A Bristol Steel Fishing Rod, made by the Horton Mfg. Co., Bristol, Conn., and listed at $6.

The 10 next best pictures will each be awarded one dozen 8 x 10 Carbutt Plates, made by the Carbutt Dry Plate Co., Wayne Junction, Philadelphia, Pa.

The 10 next best pictures will each be awarded one dozen 5 x 7 Carbutt Plates.

The 10 next best pictures will each be awarded one dozen 4 x 5 Garbutt Plates.

A special prize: A Goerz Binocular Field Glass, listed at $74.25, will be given for the best picture of a live wild animal.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or animals, representing in a truthful manner shooting, fishing, amateur photography, bicycling, sailing or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of RECREATION. Negatives not to be sent unless called for.

In submitting pictures, please write simply your full name and address on the back of each, and number such prints as you may send, 1, 2, 3, etc. Then in a letter addressed Photographic Editor, RECREATION, say, for instance:

No. 1 is entitled —— ——.
Made with a —— —— camera.
—— —— lens.
On a —— —— plate.
Printed on —— —— paper.
Length of exposure, —— ——.

Then add any further information you may deem of interest to the judges, or to other amateur photographers. Same as to Nos. 2, 3, etc.

This is necessary in order to save postage. In all cases where more than the name and address of the sender and serial number of picture are written on the back of prints I am required to pay letter postage here. I have paid as high as $2.50 on a single package of a dozen pictures, in addition to that prepaid by the sender, on account of too much writing on the prints.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

DEVELOPMENT.

Great care is necessary in the manipulation of sensitive plates to guard them against injury by diffused light entering lens, camera, plate holder, or dark room, or the use of too strong a light while developing.

A ruby glass covered with orange colored paper, known as gold bank envelope, is recommended for the dark room light. Ruby color being the least actinic, offers th greatest protection. The safety of the light can be tested as follows: Cover one-half of a plate with opaque paper and hold it close to the light about one minute. Develop, and if the unprotected part shows fog, screen the light with additional paper until it is safe. It is advisable to have a second ruby glass arranged in a sliding frame to serve as a safeguard when working isochromatic plates. This frame should only be removed while examining the progress of development. The lens should be examined by pointing the camera toward strong light, and if there are reflections caused by the shining edges of the diaphragm or the inner walls of the tube the shining surfaces should be blackened.

To test the camera and plate holder, protect a plate partially by a strip of black paper on its face, place in the camera, draw the slide and expose 5 minutes while the lens remains covered. If camera and holder are not light-tight it will show on developing the plate. Fog is often caused by light entering the slide or between holder and back of camera.

A developer containing a surplus of alkali effects more detail in the shadows and lessens the intensity of the high lights, which causes more softness in the negative; consequently such a developer suits well for under exposed plates, which explains why for under exposures a preliminary bath in a soda solution or ammonia solution is used to advantage. A large number of developing substances, such as pyro, eikonogen, metol, hydrochinone and glycin, quickly intensify the high lights, and hasten the development, so that the shadows remain far behind; therefore a modification by little over exposure, dull lighting, or soft-working plates, is of good service.

The developer diluted with water slows the process of development, gives the shadows more chance to work through before the high lights have gained their strength, prevents contrast, and therefore is recommended for contrasty plates or under exposure. The old or used developer acts the same as bromide, checks the development, and clears, and is used when plates are greatly over exposed or a general fog is apparent.

A soft camel's hair brush may be used to remove dust from plates before placing them in the holder or dark slide. If the brushing is done hurriedly, the film will be instantly electrified and attract to itself more dust than you remove.

When plates are exposed and set away for future development, be sure to set them face to face, as they were in the original boxes. If the face, or film, is placed against the back, you will probably have finger marks on the film, caused by the fingers coming in contact with the backs of the plates while placing them in the holder.

It is advisable to use a fresh solution of hyposulphite of soda each day during hot weather. The fresh solution hardens the film, and alum will not be necessary. Thorough fixing and thorough washing, followed by quick drying, will insure permanency and fine printing quality in the negative.

During the hot season the developer must be used more diluted and cold, by placing in ice-cold water; while during the cold season it should be stronger and moderately warm, about 70° F. Developer which is too strongly alkaline or too warm, produces stain and fog.

As soon as over exposure is noticed in developing, check it immediately by plentiful washing and finish with the regular developer, to which has been added bromide or old developer. An under timed plate should be treated with a fresh, diluted developer. If sufficient detail does not appear, take the plate from the developer, and, without rinsing, place it in a tray containing water, to which a little of the alkaline solution (sulphite and carbonate of soda) has been added, and leave it there as long as it increases in detail. If it is not then strong enough, the development may be continued in fresh developer.

To prevent sand or rust from striking the negatives while washing, tie a piece of cotton flannel over the faucet.

Negatives exposed to white light before the bromide of silver is thoroughly dissolved in the fixing solution will be foggy, and the printing quality will be injured.

A solution of bromide of potassium, one ounce of bromide to 10 ounces of water, should be in every developing room. When plates are a little over exposed, a few drops of this solution added to the developer will restrain its action and may thus produce a good negative from what would otherwise be a worthless plate.

Fog is caused by over exposure, white light entering camera or dark room, too much light during development, unclean trays, developer decomposed, too warm or containing too much carbonate of soda or potassium. A slight fog can be removed by the red prussiate and hypo reducing solution.

Weak negatives with clear shadows are caused by under development; too strong ones, with clear shadows, by under exposure, or too strong developer.

Weak negatives with plenty of detail in the shadows are caused by over exposure, or too weak developer. Add some of the contrast developer to the normal.

Developer being excessively strong or too warm gives too much intensity. Negatives dried in warm, sultry air assume more intensity than when dried in a cool place with draft.

Using too stiff a brush in dusting plates makes fine transparent lines.

Round transparent spots result from air bubbles in the developer.

Transparent spots of irregular shape are caused by dust. Keep the camera and holder free from dust and brush the plate carefully before placing in the holder.

Yellow and brown stain or iridescence of the surface is caused by decomposed pyro solution, insufficient or decomposed sulphite of sodium in developer; using the developer warmer or stronger in alkali than the plate will stand; also by plain hypo solution, which by continued use has assumed a dark color, or by insufficient fixing. The stain may be removed by applying the red prussiate and hypo reducing solution and the iridescent surface can be wiped off with a tuft of cotton while the negative is wet.

Mottled appearance of negative is caused by precipitation from the fixing bath containing alum, if the solution is old or turbid.

Crystallization on the negative and fading of image are caused by imperfect elimination of the hypo.

Peculiar streaks and blotches, in the shape of brush marks, finger marks, and insensitive spots, appearing as though the plate had been scrubbed with a dirty or greasy brush, or improperly cleaned, are caused by the uneven action of the developer. This trouble is more likely to occur if hydrochinone is used in connection with eikonogen or metol, when the developer is too old or too much diluted, and can be prevented by a previous soaking of the plate in water, or by a radical change to a different developer.

If the hydrometer be used, the most convenient way is to make up saturated solutions and to add water to a portion thereof, until the hydrometer indicates the desired degree. It makes no difference if dried sodas are used in place of crystals when the solutions are prepared by hydrometer test; but if they are prepared by weights it must be borne in mind that one ounce dried or anhydrous soda is equal to about 2 ounces crystals, owing to the water of crystalization the latter contain. This applies to both the sulphite and the carbonate of sodium. When dissolving dried sulphite or carbonate of sodium, the water should be vigorously stirred with a glass rod while adding the powdered chemicals, to cause speedy solution and prevent the formation of a solid lump, hard to dissolve. Carbonate of potassium may be substituted for dried carbonate of soda and is of equal strength. The carbonates of soda or potassium are added to give the developing agent the alkalinity required for action, whereas the sulphite is added to prevent rapid decomposition and discoloration. Sulphite of sodium and its solution decompose by contact with air, and therefore should be kept in well stoppered bottles. The solution should be used while fresh. It is important that pure sulphite and carbonate of soda be employed.—From the International Annual of Anthony's Photographic Bulletin for 1902.

WHY IT WON THIRD PRIZE.

Savanna, Ills.

Editor Recreation:

I do not criticise you nor Recreation; neither am I a crank; but I do not think justice was shown me when my woodcock photos were turned down for "Fly Fishing," "A Howling Coyotte," and "Besieged." Now, honestly do you not think my "Mother Woodcock" is a much rarer subject than the 3 that were placed ahead of mine? When is there a time during our spring, summer, or late fall that such an exposure of a spider can not be made in any garden, or in some secluded spot in our woods? Are there such opportunities with mother woodcock? I supposed preference would be given in your contest to photos of game birds and wild animals in their native haunts. Mother woodcock was at home, just as I found her. If you look closely at the photo "Besieged" you can see a rope, or string running from the bank just over the dog on the branch toward Mr. Coon's collar; but as there is not much detail in the water beyond the man, the other end of the boat, that which appears to be the rope or string held by some party on the shore is lost to view. I do not consider that detail is properly shown in water unless the water is made to appear wet. If detail is not one half the making of a good negative, pray what is? If the maker of this negative had selected a day when a gentle breeze cut the surface of the water more plainly, he would have had more detail beyond the man in the boat, and immediately in front of the farther bank. Instead, the water looks chalky and without detail.

I do not think there is much detail or interest in the photo of the howling coyote. I do not care for the prize, but I do for the place. When you print my "Mother Woodcock and Nest," give it justice, and when you reproduce it publish this letter and have the readers of Recreation judge for us, the same as they judged for Mr. Balch regarding the beaver photo. I respectfully ask Recreation readers, interested in photography, to examine the 3 photos mentioned and then the mother woodcock photo. If I lose, I shall consider I am no judge of the making of a rare negative. A great many of my friends as well as others, some readers of Recreation and some not, do not think I have been treated right. In my photo of the nest I threw my focusing cloth over some twigs to shut out the light of the sun from the eggs, in order to prevent halation on the eggs, thereby securing detail on eggs. The amateur photographers here think the judges were away off in their decisions.

Homer G. Gosney.

ANSWER.

I had 3 good men to judge the photos and after careful consideration of all in hand they decided that the fishing scene was best, all things considered.

There are other elements that must be taken into account in awarding a prize to a picture, than the difficulty of getting it; and while your woodcock picture is interesting, rare and valuable, I think the judges placed it about as high in the list as they were warranted in doing. The fishing picture has many elements of value in it. In the first place it was made on a 6½ x 8½ plate. In the second place it was made with a very fine lens, one which probably cost $75 to $100; and it is impossible for any person to get as fine detail in all parts of a picture with a cheap lens, as this man got in his with a good one. Then in the deep shadows there is fine, sharp detail. The pose and the action of the men is lifelike and real. I doubt if they knew they were being photographed. Whether they did or not they were attending strictly to business. You will see all through the foreground drops of water and bits of foam in the air, 6 inches to a foot above the surface of the water. This is a rare effect to get in a marine picture and it takes a fine lens, a rapid shutter, a rapid plate, and careful focusing to accomplish all that this man has accomplished in this picture.—Editor.

RESULT OF USING ISO PLATES.

Herewith I enclose photo of a young man standing in the woods, and near him a bench on which is some oak bark. This picture and another were taken at the same time to show the difference between the results obtained by using isochromatic plates, which are especially for color values, and ordinary plates. This picture was taken at 2 p. m., stop 8, and was given 14 seconds. The day was cloudy. The trees in the distance look as if the whole picture was taken in a studio. It merely goes to show the value of the isochromatic plates for outdoor scenes as well as for interiors. If the amateur would take an ordinary plate and an isochromatic of the same speed, give them the same time, same stop, and develop with the same developer, he would see a vast difference, and I believe would take only the isochromatic plate for any subject in the future. The cost is only 5 cents a dozen more, and 5 times as much good and pleasure result from seeing a good negative. Isochromatic plates give a better appearance and a softer negative.

This picture was taken on a slow isochromatic plate, which will hardly do for portraits out of doors, as 14 seconds is too long, especially if any wind be blowing. The instantaneous plate is best for outdoor scenes, especially if it be stopped down to 16 F., or 32 F., but for all around work the medium brand is a plate hard to duplicate. The best effect of sea views or snow scenes can be obtained on Aristo Platino paper from these plates. The surf and foam of the waves then show as clearly as it is possible to get them. Isochromatic plates are no more difficult to handle than any other. Simply keep the white light from the plate, and do not keep it too near the ruby light. A red lantern with no white light coming out of any small holes or openings, is as good a lamp as can be had. Use a pyro developer. Many people do not wish it, but it brings out things clearly, and gives the best negative to print from. One need not keep his hands in the pyro all the time. An old knife is handy in the dark room, for plates sticking in the holders and to lift the plate out of the pyro. It will not stain the hands at all.

Following is a good formula for small quantities of developer, to be made up and used as one wishes to develop, say only 2 or 4 plates. It costs little and is always full strength, giving good results. Stir into 8 ounces of boiled water,

1 drachm (60 grains) carbonate of soda.
2 drachms (120 grains) sulphur.

For users of 4x5 plates, 4 ounces is plenty. When dissolved, add 3 grains of dry pyro for each ounce of water. Less pyro, less intensity.

This formula gives the full strength of the pyro.

In making hypo, use plain hypo and water; 4 ounces of water to one ounce of hypo, and lay aside all other chemicals, especially in winter.

H. P. Wightman, Evanston, Ill.

The photo which Mr. Wightman refers to, while possessing all the good points he claims, is not of such a nature as to warrant reproduction.—Editor.

CYKO PAPER.

The best developing paper I have ever used for black and white effects is Cyko. It is simple to use, and does not cost much more than ordinary printing paper. To try it I selected the best plate I had and went to my dark room. I printed by the light of a candle, by opening the slide on my dark-room lamp and holding the frame about 4 inches away from the light. I exposed the first print about a minute and then developed it. Only a dim outline presented itself. I then refilled the frame, exposed the second sheet 2 minutes, and had better results. I then tried another sheet on the same plate, giving it a few seconds more exposure. I put it into the developer, and after about 20 seconds I could see the outlines. The picture soon came into full view and far exceeded my expectations. I wish some of my fellow photographers would try this paper. They can get it by sending to The Anthony & Scovill Co., 122 Fifth Ave., New York.

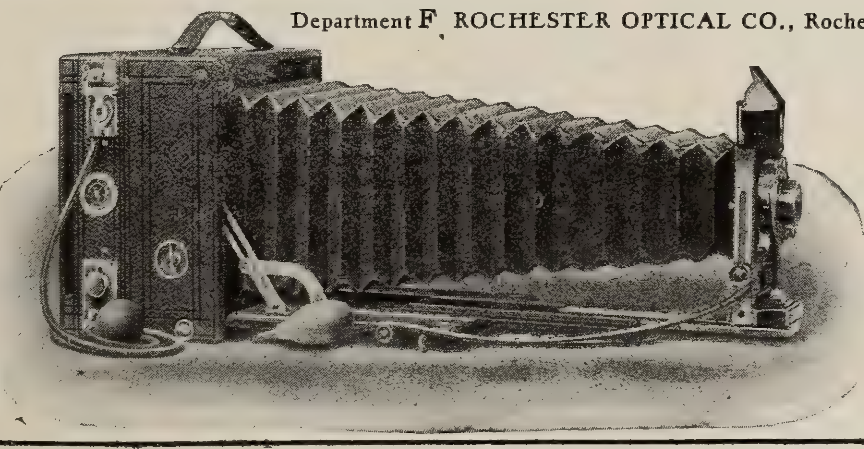
J. C. C., Beatty, Pa.

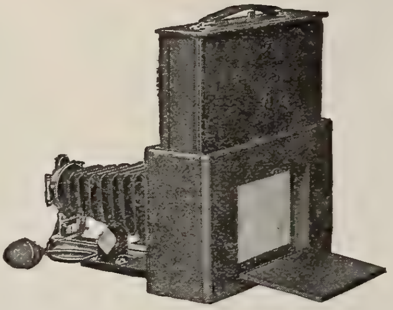
From Daguerre to the

Premo Supreme

Every camera improvement since the day of Daguerre; every idea that has increased the accuracy and efficiency of picture taking, has been crystalized and perfected in the Premo Supreme. The highest type of camera modern science can produce, and a worthy representative of the famous line of Premos. Fully described and pictured in the Premo book for 1902. An authority on all the requisites of Photography. To be had at the dealers, or sent free by mail.

Department F, ROCHESTER OPTICAL CO., Rochester, N.Y.





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THE FOCUSING WENO HAWK-EYE

Uses daylight loading film cartridges and may be focused on the ground glass. The touch of a button releases the film carrier which is then pulled up by the handle, the ground glass springing automatically into place. Instant and positive in operation. The focusing scale may, of course, be used when desired. An extra extension to bellows permits of working to within 18 inches of subject.

Improved rising front, B. & L. Automatic Shutter, with iris diaphragm stops. Finest Rapid Rectilinear Lenses. Perfect in construction and finish.

No. 3 Focusing Weno Hawk-Eye, (3¼ x 4¼),	**$27.50**
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Hawk-Eye Catalogues at your dealers or by mail, free.

BLAIR CAMERA CO., Rochester, N. Y.

"Pardon me, me dear man, but could I trouble you for a match?" After lighting his cigar he continued: "Bah, Jove, this is a remarkable city. This is my first visit to New York, d'ye know? I'm a deuced stranger, but on the other side I'm a person of importance. I am Sir Francis Daffy, Knight of the Garter, Knight of the Bath, Knight of the Double Eagle, Knight of the Golden Fleece, Knight of the Iron Cross. D'ye mind telling me your name, me dear man?"

Replied he of the auburn hair, in a deep, rich brogue: "Me name is Michael Murphy, night before last, night before that, last night, to-night, and every other night."
—Big Four Gazette.

Inclosed please find check for $1 to renew my subscription to your interesting magazine for another year. I have been a reader of RECREATION for 6 years and its coming every month brings with it true recreation from the worries and cares of business. The interesting experiences of other sportsmen, the information from the game fields of our country, and above all, the personal efforts of the editor to elevate the tone of a noble sport and, refine the instincts of its votaries, are what make your magazine so welcome in our home. Success has already crowned your efforts, but may you still be many times more successful. F. H. Jones, Norwalk, O.

NEWCOMB'S GUARANTEED PHOTOGRAPHIC PREPARATIONS

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Full Directions

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THE latest and best article for filling in holes in the negative, so no spot will show on the print. Also for touching up all black and white prints. Two shades of medium to match any tint. Anyone can use it, and improve negatives and prints amazingly. Spot your negatives before printing, or before sending them to be printed, for best results.

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PUT up in glass tubes, each tube making solution to coat 3 to 4 sheets 18x22. A luxurious article at a low price for coating paper, note head, postals, cloth, etc. A rich blue and fresh paper always assured. Blue prints are coming in. Better try my tubes. Full directions.

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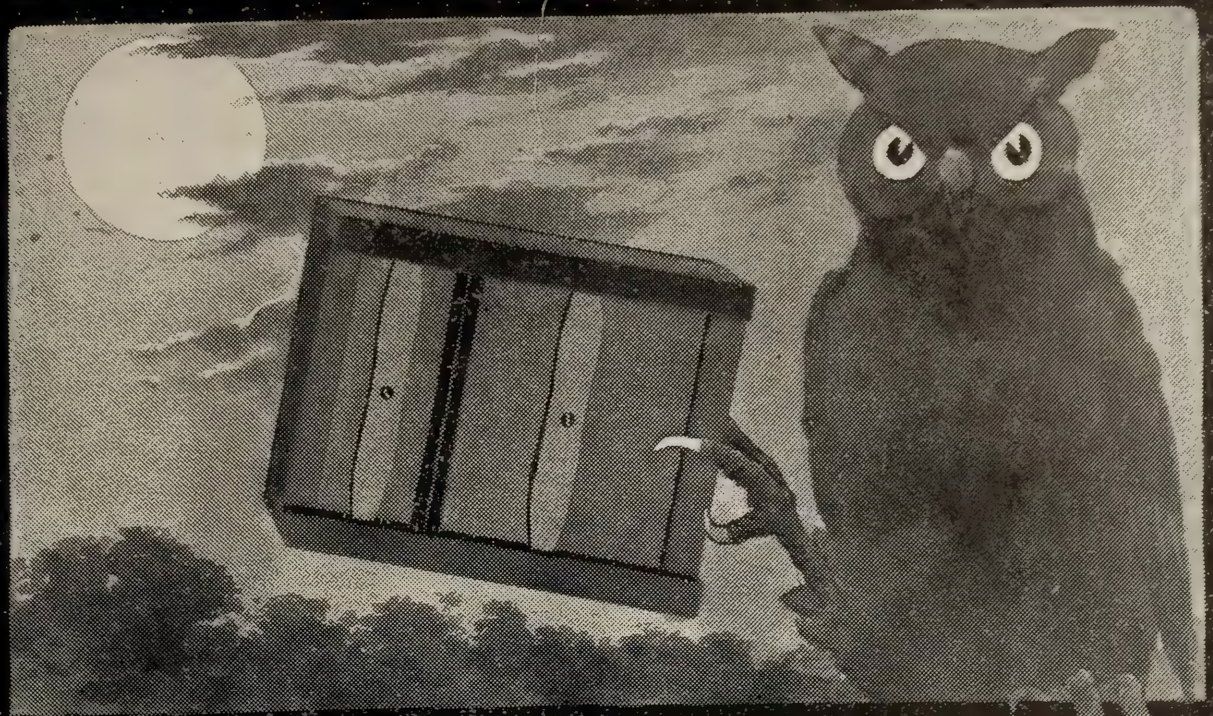

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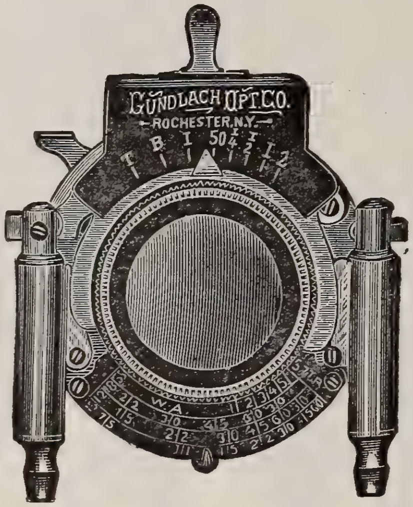
IT'S ALL IN THE LENS

The Value of a Camera

IS IN THE LENS



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Korona Cameras

ARE BETTER
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We have been makers of high-grade photographic Lenses for 18 years, and as practical opticians fit our Cameras with the Lens most suitable for the needs of the photographer.

We make KORONA CAMERAS complete in every detail in the best equipped camera factory in the world, and as Camera Lens and Shutter are all made under our supervision the finished product cannot but be better than if they are the nondescript product of different makers assembled together in one instrument.

A Camera manufacturer who does not make the Lens puts the reputation of the Camera in the care of the Lens manufacturer, who is a disinterested party.

If you want a good Lens,

Buy a Korona.

Send for catalogue and mention RECREATION.

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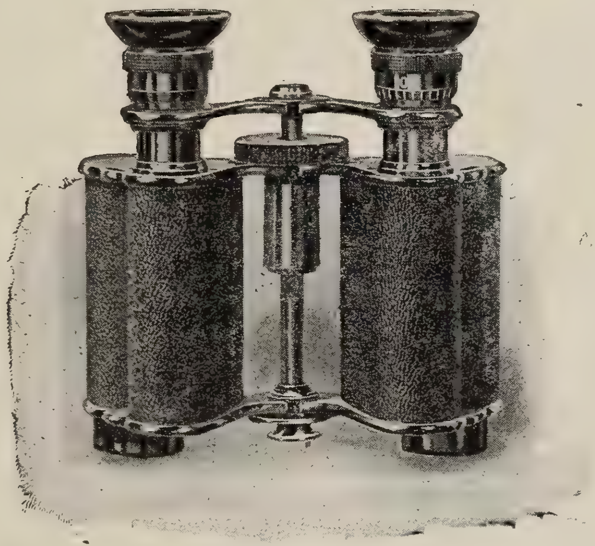
Rochester, N. Y.

The Turner-Reich Binocular Field Glasses

cannot be compared with glasses of the old type and have so many advantages over those of ordinary construction that any user of such an instrument cannot afford to overlook their merits when selecting a field glass.

The principles of optics governing the Turner-Reich Binoculars permit them to be made ⅔ smaller for a given power and at the same time include a larger field of view. They magnify more and give brilliant, crisp definition with a perfectly flat field. They can be adjusted for any difference existing between the eyes of the user and also for pupillary distance, an advantage seldom possessed by a field glass which insures perfect coincidence of the image as seen by each eye and prevents the eyes being strained or tired when using the glass. They are made in 6, 8 and 10 power, magnifying that number of diameters. Each Binocular is furnished in a sole-leather case with shoulder strap. We would recommend them to



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REQUIRE A PERFECT AID TO VISION

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Rochester, N. Y.

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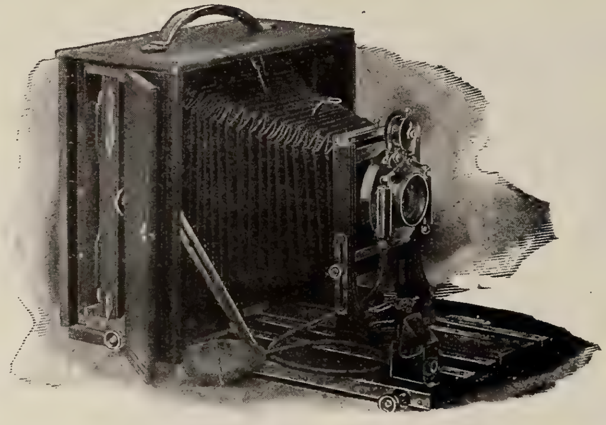

1902

Century Cameras

Are the *finest* in the World

A broad statement, but just ask your dealer, or write us for a copy of our new catalogue and you will understand why.

CENTURYS have more exclusive, practical and original features than any other line in the market. Ten different models from $9.00 to $100. The Century catalogue for 1902 is free—a postal request will bring it.

CENTURY CAMERA CO.
Dept. R. **Rchester, N. Y.**

It is all in the Lens

Any old box will answer the purpose if it does not leak light; but you must have a fine lens to make a fine picture.

You can get

A Royal Anastigmat Lens, 4x5, Series No. 1

Made by the Rochester Lens Co., Rochester, New York,

And listed at $45, For 40 yearly subscriptions to RECREATION

You can get any other lens made by this Company on the basis of one subscription to each dollar of the list price of the lens.

Sample copies of RECREATION for use in soliciting furnished on application.

Deer on Long Island are being exterminated mostly by sportsmen (?) from Brooklyn and New York. The firing lines around Bay Shore, Islip, Oakdale and other places were crowded, the men being 50 or 75 yards apart for nearly 3 miles. Some of the participants got 4 to 5 deer in a morning, mostly does and fawns. Some got on private grounds or club enclosures and were saved. I am told that about 500 deer were killed in the 5 days' shooting.

A heavy license should be imposed on non-residents in townships where deer are.

Plenty of broadbills, shell-ducks and brant on the Great South Bay, and in the fall a few black ducks and pintails. Ducks seem to be increasing now. The successful method of getting these is from a blind or scooter.

I wish you and the L. A. S. could do something for the protection of our deer.

Subscriber, Babylon, L. I.

I find, as several friends of mine have found, on looking over the different sporting publications, that for valuable reading matter and up-to-date news, RECREATION far surpasses all. Your magazine does not fill its pages with scores made by everybody from the Atlantic to the Pacific, but gives good reading matter with plenty of good illustrations.

Jacob Weil, Jr., Chicago, Ill.

For Extra Gilt Edged

QUALITY

In printing out papers
use only those of

Monarch

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AND THE MONARCH OF ALL
MONARCHS IS MONARCH MATTE.

The finest photographic
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If your dealer would rather
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write to

THE ANTHONY & SCOVILL CO.
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WITHOUT THIS MARK
DON'T TAKE THEM

TAKEN WITH A REFLEX

PHOTO BY T. W. INGERSOLL, ST. PAUL, MINN.

Every Sportsman
should have a

Reflex Camera

The only Camera adapted for taking sporting and game pictures.

Write for Particulars
Mention RECREATION

Reflex Camera Co.
YONKERS, N. Y.

Here are the fundamental laws of sportsmanship, as I see them:

Never violate the letter or spirit of the game laws.

Never take more fish or game than you can use.

Never shoot a game bird except on the wing.

Never kill the last bird in a covey; leave some for seed.

Never fail to destroy a net or trap that you find set.

Never forget that game laws are intended to improve sport; not to prevent it.

Never put a wounded bird in your bag; a quick death is more humane than a lingering one.

Never leave your fire burning when you leave your camp.

Never be insolent to a landowner who orders you off his premises; he may not own the game, but he certainly owns the land and you do not.

A. M. Barnes, Philadelphia, Pa.

Hunters and Travelers Should Use

BUENA Self-Developing PLATINUM PAPER

No chemicals. No trouble Nothing but water needed to obtain good pictures. Our "PURO" Gelatin paper (insoluble) is uniform, reliable and easy to manipulate. Will tone well in any good gold bath. **Perfect Results with both these Papers Guaranteed.**

Sample Orders filled as follows:
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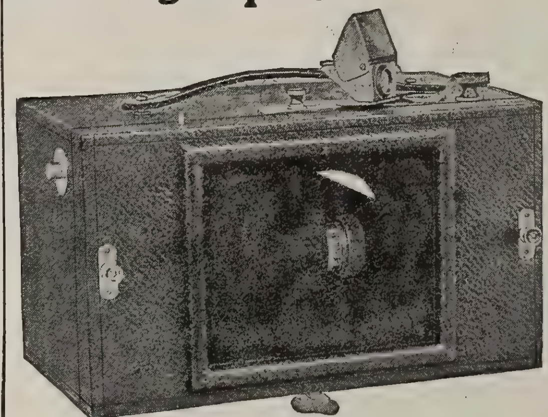
Puro P. O. paper, 2 dozen 4 x 5, ... 25c
" " " 2 " Cabinets, . . 30c

M. H. Kuhn Co., 12 Commercial St., Rochester, N.Y.

Are You an Amateur Photographer?



If so, would you like a Camera that will photograph
A whole range of mountains
A whole sweep of river
A whole army
A whole fleet of ships
A whole city

Or any other vast stretch of scenery or moving objects? THE SWING LENS DOES IT.

The AL VISTA

Is the thing. It lists at $30.

One of the greatest inventions of the age.
Given as a premium for 12 Subscriptions.

For particulars address
RECREATION, 23 West 24th Street
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There are Many ANASTIGMATS But Only One

VERASTIGMAT

(True Stigmat.)

A Convertible Lens

Some Anastigmats are better than others but none is better than the VERASTIGMAT

We don't ask you to believe it because we say so, but we would thank you to test the

A Wide Angle Lens

VERASTIGMAT side by side with all others before you buy

Send for our booklet; it is instructive and interesting, and to be had for the asking. Mention RECREATION

Manhattan Optical Co. of N. Y., - - Cresskill, N. J.

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Fitted to the

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MAGAZINE CAMERA

Makes an Ideal Outfit

and forms a combination that makes photography a positive art, and also solves the problem of taking pictures under all conditions.

All Successful Newspaper Men use GOERZ LENSES

They can be fitted to all makes of cameras and kodak, and are the highest type of photographic lens manufactured. Catalogue free from your dealer or—

C. P. GOERZ OPTICAL WORKS

Room 27, 52 E. Union Square, NEW YORK. Main Office: Berlin-Friedenau, Germany

THIS PICTURE was made with an ordinary camera, but with the aid of **Nehring's** new

Kosmos Portrait Lens

which increases the speed of your lens to **F=5,** thus making it faster than any Anastigmat made. **Scientists** agree it to be the

Greatest Photographic Improvement ever Introduced.

It can be used with any camera or kodak made.

PRICE

No. 1	3¼ x 4¼	$1.50
No. 2	4 x 5	2.00
No. 3	5 x 7	2.50
No. 4	6½ x 8½	4.00
No. 5	8 x 10	5.00

If your dealer cannot supply you, write direct to the maker.

U. NEHRING, - 16 East 42d Street, NEW YORK

FREE To everyone who will send in a subscription to RECREATION through me I will give, free, a photo of the late President McKinley; or of the Esplanade, or any of the buildings at the Pan-American Exposition. These photos are all on Velox or Aristo paper. The one of President McKinley was made September 6th, the day he was shot. All prints perfect. F. E. WILKINSON,
172 Woodlawn Ave., Buffalo, N. Y.

Free: For 1 year's subscription of RECREATION, through me, will give 1 Bromide enlargement, any size up to 11x14 inches inclusive, from any negative not larger than 4x5; or from photographs. Negatives and Photos to be returned to the owner. Here is a rare chance to get a large Photo from your pet Negative, also RECREATION for $1.
A. F. Evarts, Meriden, Conn.

FREE DESCRIPTIVE BOOKLET ON HUMIDITY.

The Polymeter is an instrument to measure the percentage of relative and absolute Humidity.

Invaluable in testing the air we breathe, whether too dry or too moist.

Indispensable in forecasting rain, storms, frost or clear weather.

Gall & Lembke
ESTABLISHED 1842.
21 UNION SQUARE, NEW YORK CITY.

The Rocky Mountain Goat

ranges almost wholly above timber line and in the wildest, rockiest portions of

The Rockies and the Cascades

Few men in the country have ever been able to photograph this rare and interesting animal. One of RECREATION'S staff photographers did succeed in making some fine photographs of goats, and I have had

A Few Enlargements

made from the negatives. One of these shows two goats, broadside on. The other shows three resting on a narrow shelter of a perpendicular cliff. Two are lying down; another is standing up, headed away from the camera, but has turned and is looking back.

The two pictures make an extremely interesting series of studies of the white goat. These photographs have never been equaled in this line and probably never will be.

The prints are 10x12 in.

and are on white mounts 12 x 16.

Price, $2 each.
How many will you have? Address
RECREATION, 23 W. 24th Street, New York

This is the kind of photograph made with

The AL-VISTA Camera

GETS
EVERY
THING
IN
SIGHT

TO THOSE WHO HAVE NOT SEEN THE work produced by these remarkable Panoramic Cameras it is a revelation. The Revolving Lens takes everything in sight, working on the principle of a focal plane shutter.

Our Co-operative Plan

We are selling directly to the consumer from the factory. We have adopted the plan of selling these cameras on monthly payments. You have the camera while you are paying for it. This certainly shows our confidence both in our cameras and in human nature. Write us for full particulars.

Multiscope & Film Co., No. 136 JEFFERSON STREET
BURLINGTON, WIS.

Goerz Trieder Binoculars

An article that appeals to almost every reader of *Recreation*. Take one with you, no matter where you go—on land or sea, in forest or mountains.

Compact. Durable.

Light in weight, finely finished, of unique design with great magnification power, they are unequalled.

Field of View 11 per cent. greater than any other

Catalogue free from your dealer or

G. P. GOERZ OPTICAL WORKS

Main Office:
Berlin, Friedenau, Germany.

Room 27, 52 E. UNION SQ., NEW YORK

I am glad our work in Minnesota meets your approval. We are trying our best but it is up-hill work on account of insufficient funds. We hope the Legislature at its next session will increase the appropriation, and if they do we can make the life of the pot hunter in Minnesota something no man will desire.

You will remember that last year I reported the finding of a tannery back of Grand Rapids, run by one Del Linden? We got him again this year, although he had moved his tannery outfit to another place. We bound him over to the grand jury and seized a lot of his hides.

We also have to report, since I wrote you last, the breaking up of another taxidermist's outfit in the woods. We fined 2 of the men $50 each and costs, and we think that will be the last of them.

The Itasca county moose case will not come before the grand jury until spring. We hope for a conviction.

Sam. F. Fullerton, St. Paul, Minn.

I will send by registered mail, post paid, 50 5x7 views printed on either Vinco, Solio or Velox paper, and mounted in a Buechner album, for $8. These views are of live and dead game, mountain scenery, lakes, waterfalls, fishing scenes and park views. A sample print will be sent for 15 cents in stamps.

S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—Editor.

I am 16 years old and a lover of birds. I should like all readers of Recreation who have any films or plates of birds to send me an unmounted print for a scrap book of birds I am making. In return I will send you pictures of the Iowa, taken aboard, and from a small launch.

Charles Grundstrom,
155 Whittier Place, Riverdale, Cal.

A Good Formula Free

To save plates use a Wager Exposure Scale. It tells you the correct exposure in every case, and saves its cost in a month. No sensitized paper, no multiplying in the head—that's a nuisance, and besides you may make a mistake. Endorsed by the Editor of Recreation. Post free, 50 cents. Aluminum $1.00. Your money returned if you don't like it. Send a postal for our Booklet No. 5, lots of hints and formulæ.

Wager Exposure Scale Co., Box 539, **Philadelphia, Pa.**

BOB WHITE WITH RATTLES ON HIS TAIL.

One chilly February day, my friend Tarrant and I concluded to try for a little sport with Bob White. Our field was in Western Florida. Tarrant assured me quails were so plentiful and tame that good bags might be had by clubbing. I made my arrangements for a rousing day. Bess, the veteran dog, capered about in delightful anticipation. Everything promised well.

Two miles of industrious beating brought to light only a few fleeting rabbits. A hawk perched in a tall pine swooped several times earthward, striking each time repeatedly at some object. Tarrant pronounced this a sure sign of the presence of quails, and we bent our steps thitherward, Bess actively covering the ground on every side.

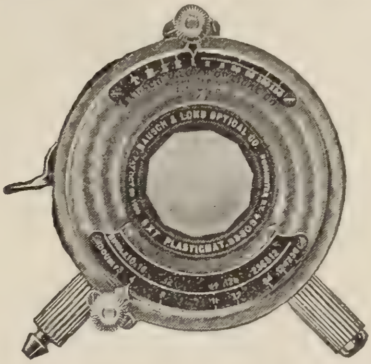
Presently she came to point abruptly, as rigid as a statue. Waiting a bit to give the covey a chance to flush, we were about to kick into the bush, when with the suddenness of a rifle report came the b-z-z-z-z of a diamond back. The effect one me was startling. Every nerve tightened as with a galvanic shock, and when Tarrant's gun belched I leaped like a "stricken doe." That shot was a squelcher, however, taking the rattler's head off clean. The snake measured 7 feet 2 inches and carried 12 rattles.

The hawk was apparently trying to kill the snake. Our bag, when we turned off steam, was 5 quails and a snake skin.

E. G. H., Pittsburgh, Pa.

Plastigmat *f 6-8*

The Perfect Photo Lens



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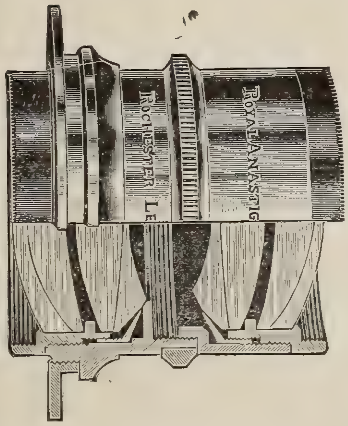
The Perfect Photo Shutter

make an ideal combination for any camera. Can be had on any make of camera or will improve the camera you now have. Send for new booklets about shutters and lenses.

Bausch & Lomb Optical Co.

NEW YORK Rochester, N. Y. CHICAGO



Royal in Name — Royal in Quality

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ROYAL ANASTIGMAT LENSES

THE ROYAL ANASTIGMAT is of the double symmetrical type, each system consisting of four elementary lenses. The absolute freedom from any trace of astigmatism, and the complete correction of the spherical and chromatic aberrations without the least remainder of aberrations of the higher order, constitute the superiority of the lens. Royals are made in three series, varying in relative aperature from F-7.7 to F-5.

For all kinds of weather, all kinds of pictures, and all kinds of people, get a ROYAL. The great speed and fineness of definition, are just what you want for your hunting and fishing expeditions. Write to-day and let us tell you more of the good qualities of these Lenses.

ROCHESTER LENS CO., - Rochester, N. Y.

Mention RECREATION.

BIG GAME HUNTING IN AFRICA.

Mr. C. B. Tiley's question in November RECREATION induces me to write about my hunting experiences in the dark continent.

My starting point was Tunis, after leaving the ship. Visions of lions, etc., caused me to provide myself with a powerful weapon, an 8mm. repeating rifle; or rather, a carbine, somewhat lighter than the ordinary hunting rifle. The first opportunity I had was in the vicinity of Gabès. There I shot my first gazelle, a buck. They can be easily driven by an experienced driver and the hunter is sure of a good shot if he keeps cool.

In that way I shot my buck. I could not see him on account of a small hill until he suddenly came in view not 100 steps away. I lay under cover, ready, but did not want to shoot until he showed his side. Instead of doing so he kept his position. Though the hot African sun was fairly blinding, there was nothing else to be done but shoot as best I could. I heard the bullet strike. The buck jumped high in the air, fell, and was dead when I reached him. The bullet struck somewhat low, but tore half the heart away.

The following month, May, I prepared for a longer excursion in the desert for the purpose of hunting the so-called sand gazelles, *Gazella loderi*, and Mendes' antelope. These can only be hunted successfully by employing a great number of drivers. However, I tried creeping up to them and, favored by a few sand hills and scanty bushes here and there. I shot a number of gazelles in that way; also one antelope. A second was killed by one of my Bedouins with his long flint lock rifle.

A terrible sirocco forced us to leave our hunting grounds sooner than we had intended. A sirocco far in the desert at the beginning of June is something to be remembered. The heat is terrible, and forces a person to drink almost continuously. We were 4 days' travel from the next well, but our water holders were new and in good condition, and we managed to get through.

In spite of the terrible heat, the sirocco, and other unfavorable circumstances, we secured 28 gazelles, 2 antelope and 2 Mane sheep.

North Africa is as easily accessible as are the good hunting grounds of the United States, and is overrun with sportsmen, but in the German possessions in Southeast Africa big game is as abundant as Mr. Tiley could desire. With a competent guide and proper introductions he would find the trip delightful, and well worth its cost. I would not hesitate to be one of the party, having had an exceptional experience hunting big game.

H. C. Engel, Crescent, Ia.

IF YOU WOULD LIVE NEXT TO NATURE, READ RECREATION.

AN UPHILL HUNTING COUNTRY.

In this State the game law is nearly a farce. We have no wardens and the slaughter goes merrily on the year round. The law forbids the sale of any game except ducks, yet you can get venison at any of the leading hotels, in season and out. This is the home of the hide hunters, and our game hogs have bristles a foot long.

We have the finest climate in the world, grand scenery, beautiful mountains, fertile valleys, and game, game, game, everywhere. The country is full of rivers and mountain streams, which teem with fish. I have seen the Elwha river so full of silver salmon that it was one wriggling mass.

This is a difficult country to hunt over, and it takes an enthusiastic hunter to enthuse after one of our mountain hunts. But if you are game you can enjoy every hard climb. But by the time you get a deer and pack it on your back 5 to 10 miles you will surely appreciate venison. No pack horse can go where our deer live.

I remember the first deer I shot last fall. Five of us had been slowly climbing up the mountains 2 days. The timber had been thick all the way until we came out in a clear place. I was some distance from the others, and did not realize I was several thousand feet above sea level until I came to the opening and found I was above timber line. Soon I saw fresh deer tracks. I concealed myself and waited about 15 minutes, looking down on the clouds, when I heard a twig break. There was my buck, walking slowly across the opening. I did not get the buck fever or forget I had a gun. But I did misjudge the distance. I aimed at his heart and pulled. The buck did not hurry away, he just walked out of sight. I ran to where he had stood; there was blood and lots of it. I sat down and waited 2 hours, then took the trail and found my deer about a half mile away. I will never forget packing that deer out. In some places I let him slide; in other places we both slid together. But we got to camp just the same, and that venison tasted good.

I use a 30-30 and think it all right. Also use a '97 model, Winchester repeater; never thought about it being a pot hunter's tool until Mr. Cristadoro mentioned it. I always imagined the man behind the gun could use it decently if he chose.

Bebee, Port Angelis, Wash.

A new boy had come to school fresh from the country, and the ready "Sir" and "Miss" of the city child were unknown to him.

"What's your name?" queried the master.

"George Hamilton."

"Add 'Sir' to that, boy."

"Sir George Hamilton," came the unexpected reply.—Opportunity.

Figures Went Wrong.

Something about Food that Saves one from Brain Fag.

That food can make or break a man is shown in thousands of cases. If one's work requires the use of the brain, the food must furnish particles that will build up the brain and replace the daily loss.

Many times people fall ill not knowing that the real cause of the trouble is the lack of the right kind of food to keep the body nourished.

As an illustration: A young man in Chatham, Va., says, "I have been employed for quite a time in a large tobacco warehouse here. My work required a great deal of calculating, running up long and tiresome columns of figures. Last winter my health began to give out and I lost from two to ten days out of every month.

"I gradually got worse instead of better. It was discovered that when I did work many mistakes crept into my calculations in spite of all I could do. It was, of course, brain fag and exhaustion. After dragging along for several months I finally gave up my position, for every remedy on earth that I tried seemed to make me worse instead of better and I had to force down what food I ate, hating to see meal time come.

"One day a friend said, 'Crider, do you know there is a food called Grape-Nuts that I believe is made to fit just such cases as yours?' The name rather attracted me and I tried the food. The delicious, sweetish taste pleased me and I relished it. In about a week my old color began to come back and I gained in strength every day. Finally I weighed and found I was gaining fast in flesh, and with the strength came the desire for work, and when I went back I found that my mind was as accurate as ever and ready to tackle anything.

"I now can do as much work as any man, and know exactly from what my benefit was derived, and that is from Grape-Nuts. I feel that it is but fair and just that my experience be known." E. P. CRIDER, Chatham, Va.

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It Holds
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Neatly,
Comfortably,
Securely.

Clasps lie
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against the
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No chafing.
No friction.

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FOR MEN

See that the word **Brighton** is on the clasps and on the box. 25 cts. a pair at all dealers, or by mail.

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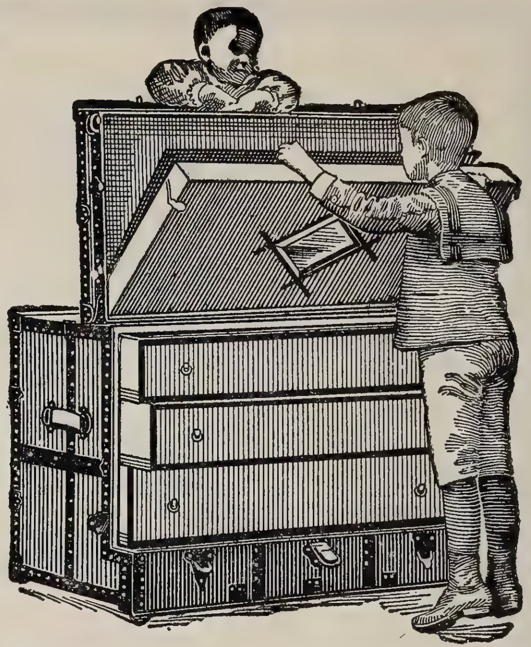

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Have you seen one? It is up-to-date. Think of it, everything within reach. No heavy trays, but light, smooth drawers. Holds as much and costs no more than a good box trunk. Hand riveted, almost indestructible. Once tried, always recommended. Sent C. O. D., privilege examination. 2c. stamp for catalogue. Mention Recreation.

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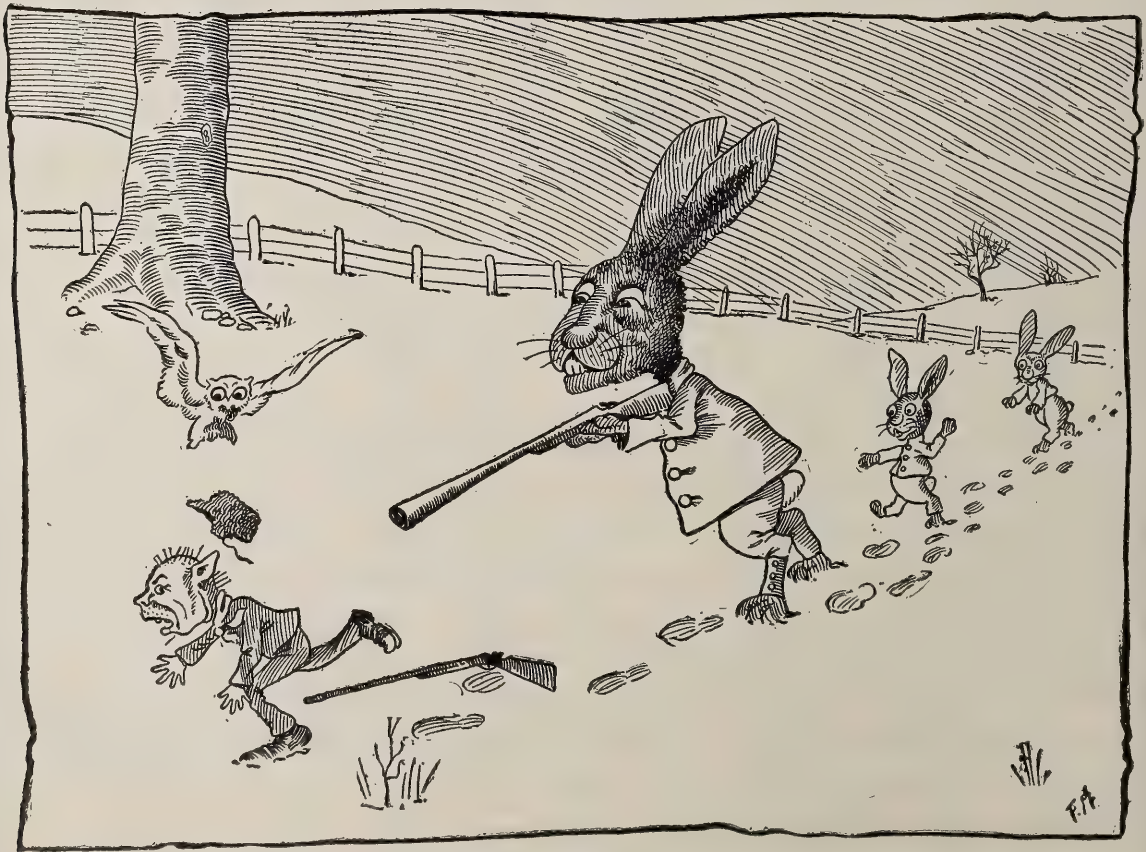

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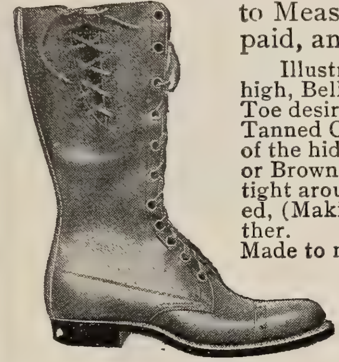

They are Genuine Hand Sewed, Water Proof, Made to Measure, Delivery Charges Prepaid, and Cost no More than others.

Illustration shows **No. 900,** 14 inches high, Bellows Tongue Made on any Style Toe desired. Uppers are Special Chrome Tanned Calf Skin, tanned with the Grain of the hide left on, (Our Special Tannage) making the leather **water proof,** Black or Brown Color, Large Eyelets, and wide leather Laces, laced at side to fit boot tight around top, Sole, light medium or heavy. The soles are Genuine Hand Sewed, (Making them soft and easy) and made of the best Water Proof Oak Sole Leather.
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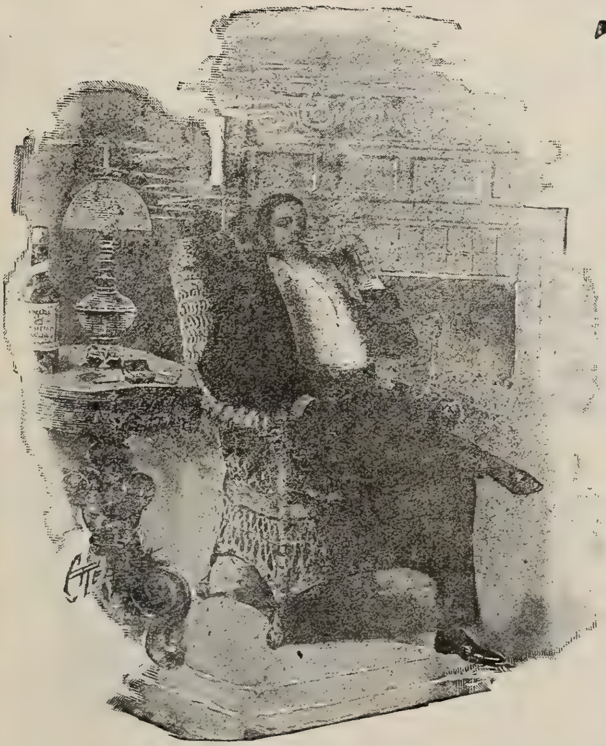

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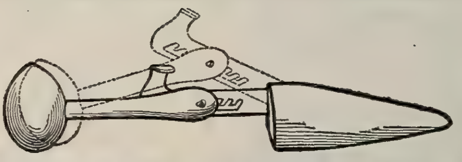
Pursuant to an urgent invitation from friends at Clear Lake, South Dakota, last fall, I got down my Winchester, packed my grip and, accompanied by my wife and daughters, set out for a chicken hunt. The hunting party consisted of Dr. Staley, C. Shepherd, J. Elmeyer, and I. We found the law well enforced and no hogs in evidence. We were out a number of times and always found good chicken shooting, besides securing a few ducks from the nearby lakes. F. G. Boyden, Bradford, Ill.



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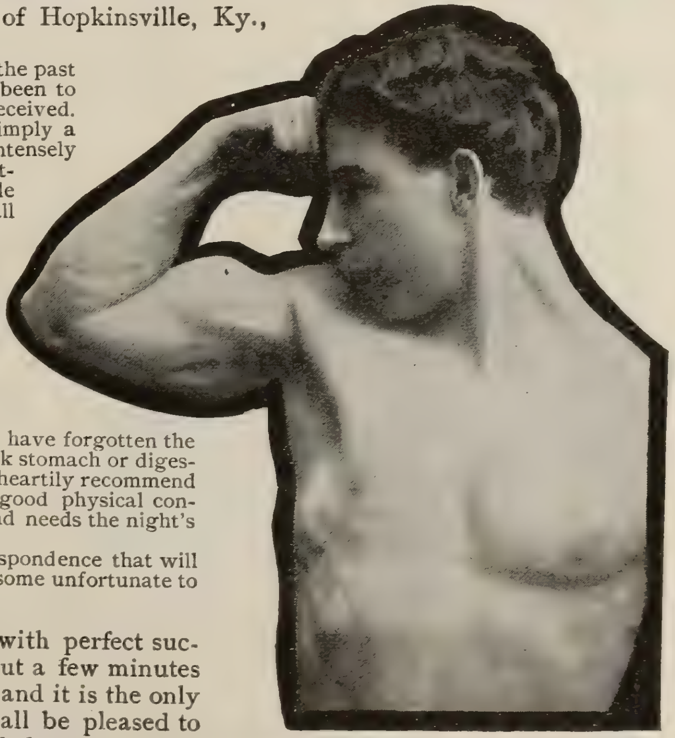
All this have I done for thousands. I can do it for you, because my system is based upon natural laws, as rational and logical as those which govern the universe.

I should like to have you take my word for it, but do not ask it—instead, I offer and shall continue to do so, the indisputable and unparaleled testimony of prominent American citizens.



Mr. C. O. Prouse, a leading attorney of Hopkinsville, Ky., writes under date of October 5, 1901:

"Allow me to thank you for your kindness for the past two months and for your instructions, which have been to me one of the richest blessings that I have ever received. At the time of beginning your exercises I was simply a nervous wreck—was constipated and suffered intensely with indigestion; was easily overtaxed when attempting work of any kind and seemed almost impossible to recuperate without leaving off for months all mental and physical labor, but thanks to you I was enabled without medicine of any description (something I had not done for over two years) to keep up with my work and at the same time increase my weight and general health until now—only two months—I feel like a new man; am healthy, strong and tireless. Now I do not know how to be tired, as the exercise you give seems to rest me instead of tiring—it acts like a stimulant to a tired body.

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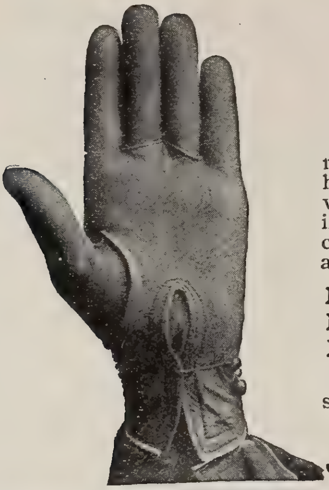

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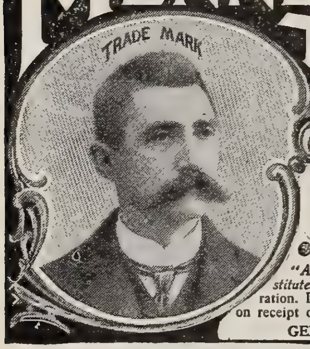

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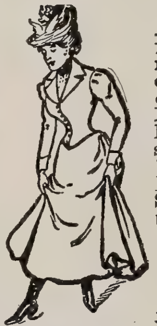

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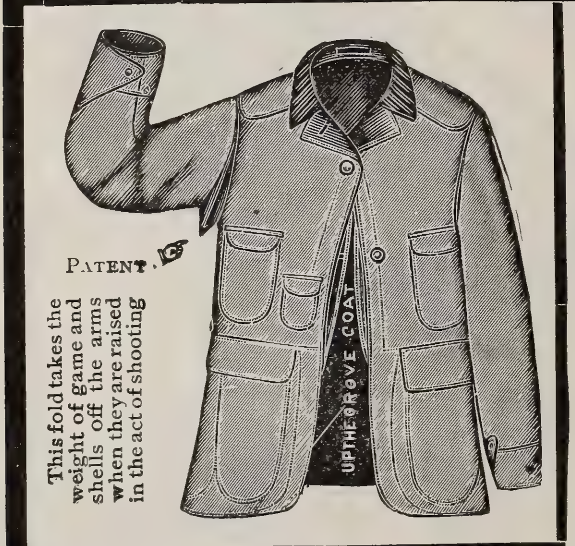
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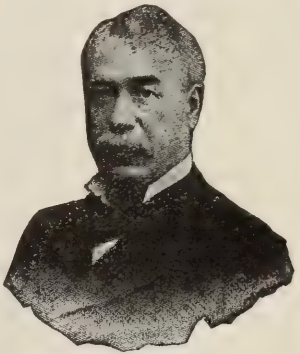

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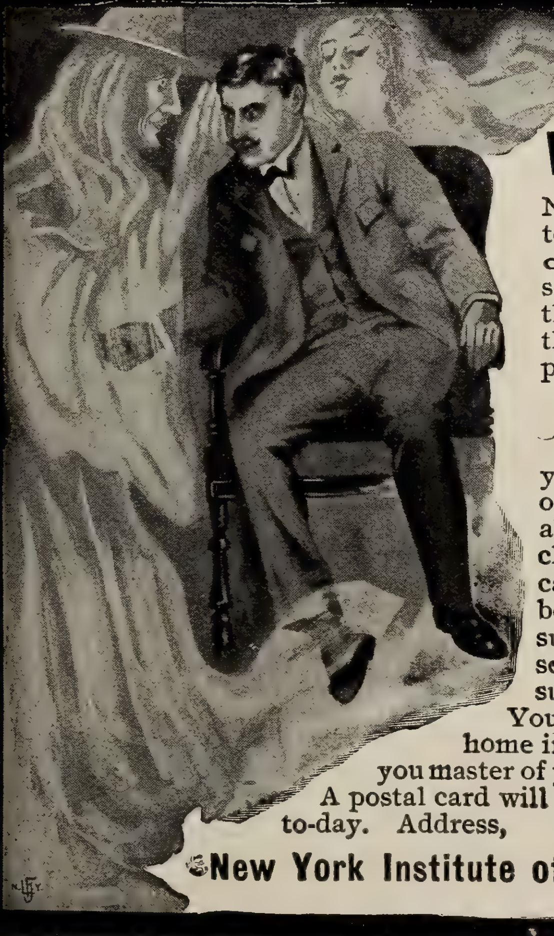

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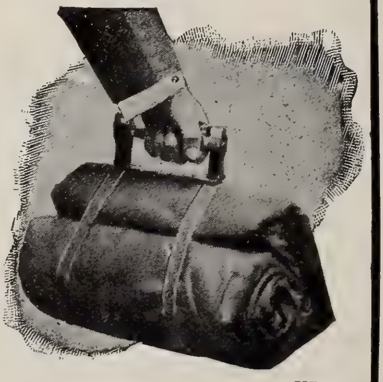

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Mr. Ernest T. Seton has recently received from the Governor of Colorado the following letter:

Feb. 17, 1902.

"TO WHOM IT MAY CONCERN:

"In answer to certain false and malicious reports, be it known that the proper officials of the Game Commission have inquired fully into all the alleged misdoings of Mr. Ernest Thompson Seton while in this State, and that Mr. Seton has been wholly exonerated from all the charges.

"(Signed) JAMES B. ORMAN,
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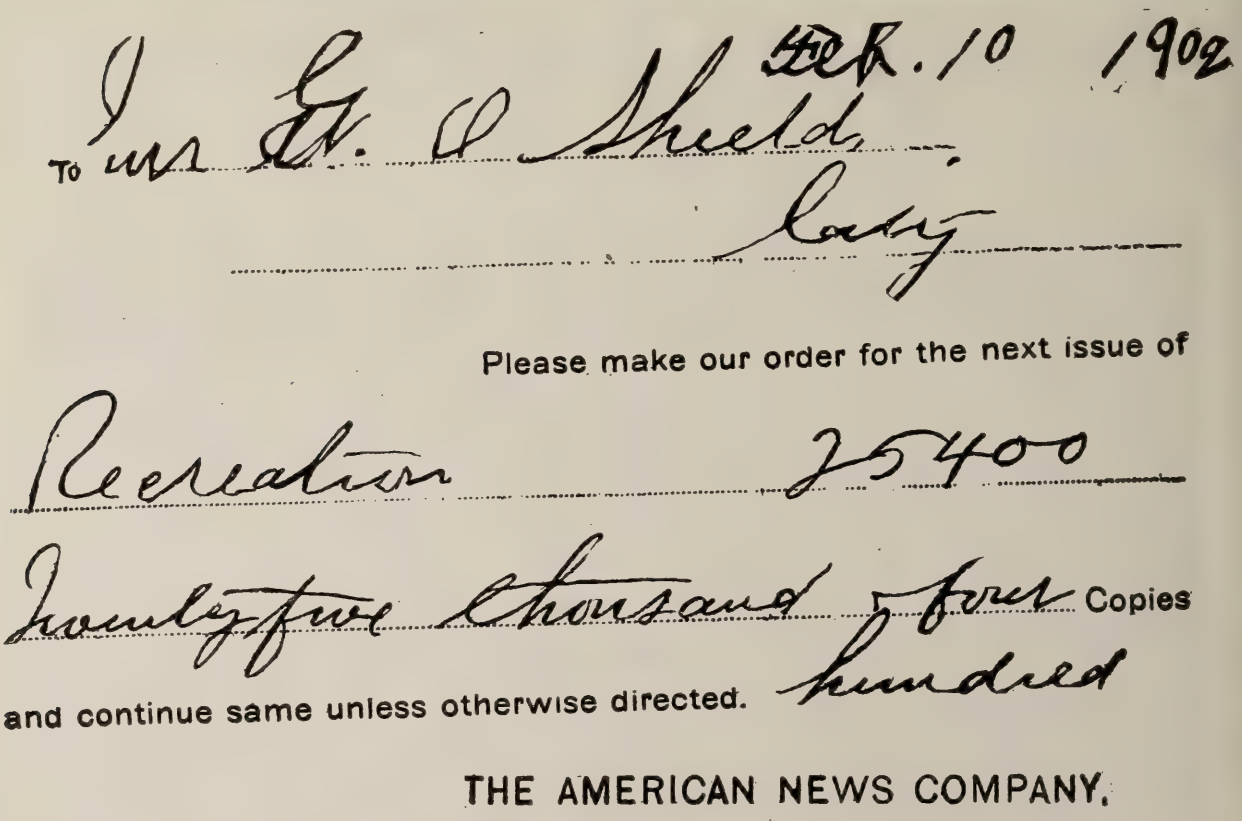

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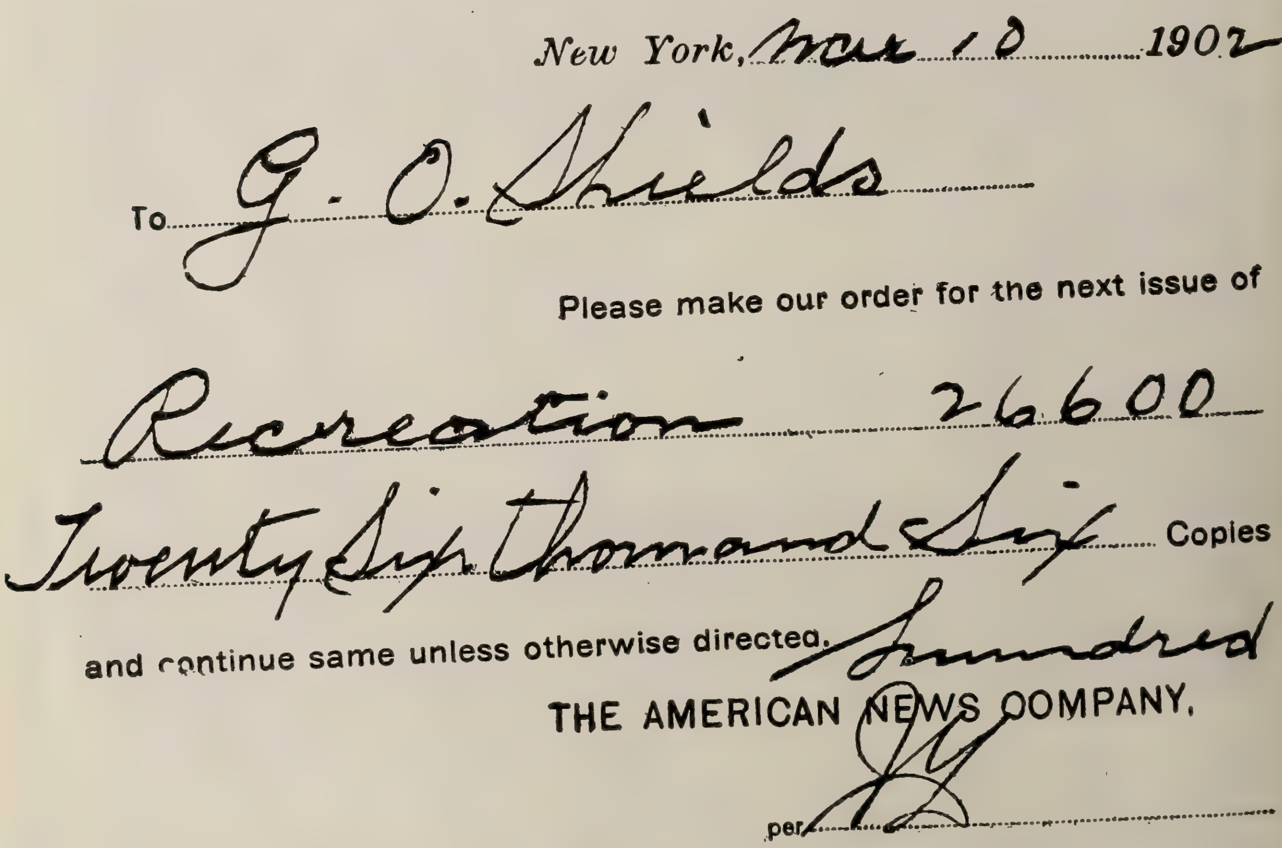

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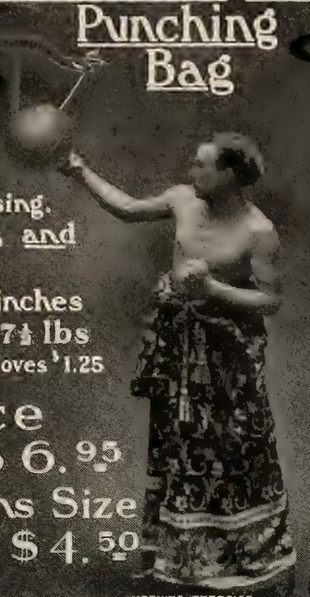

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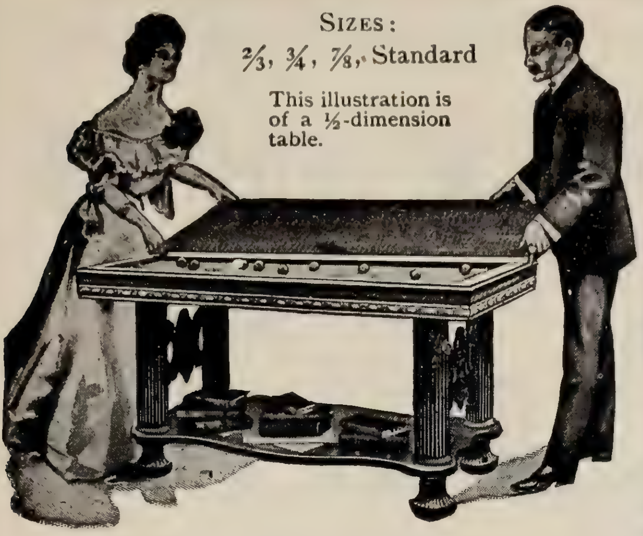
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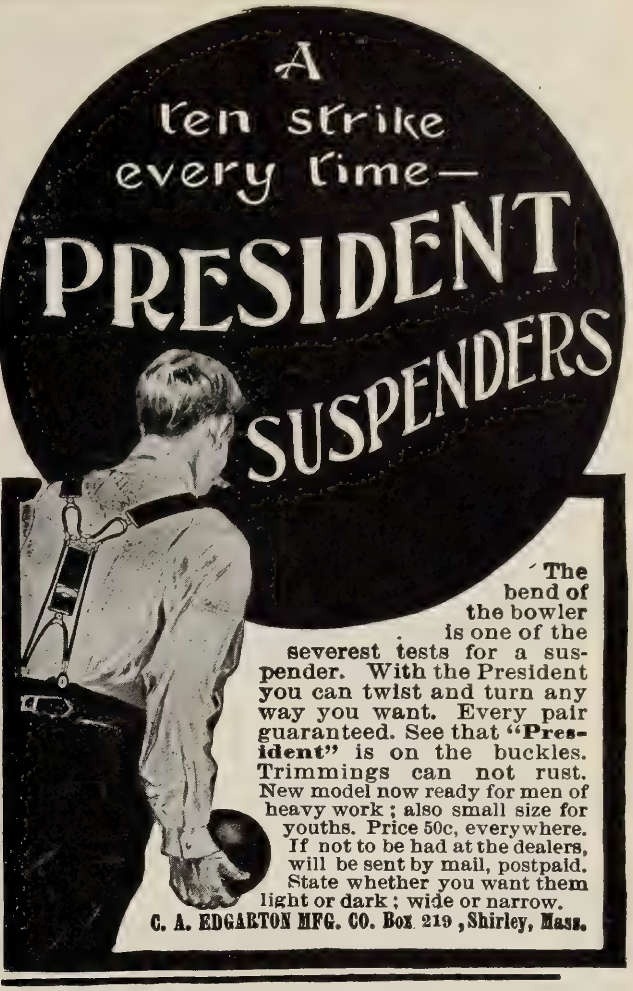

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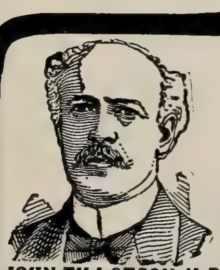

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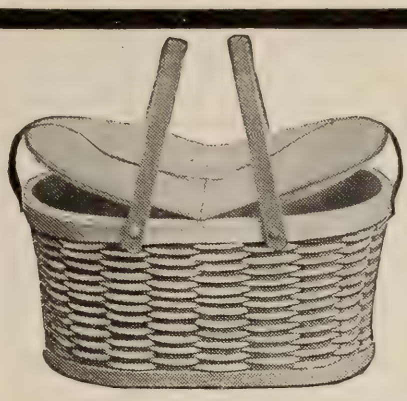

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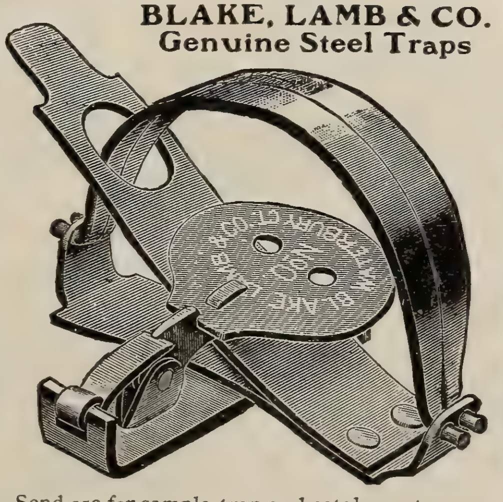

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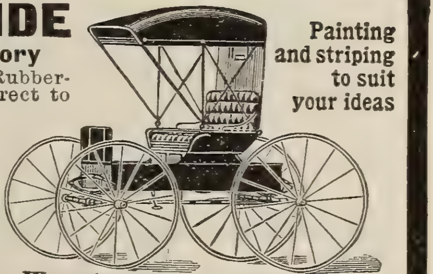

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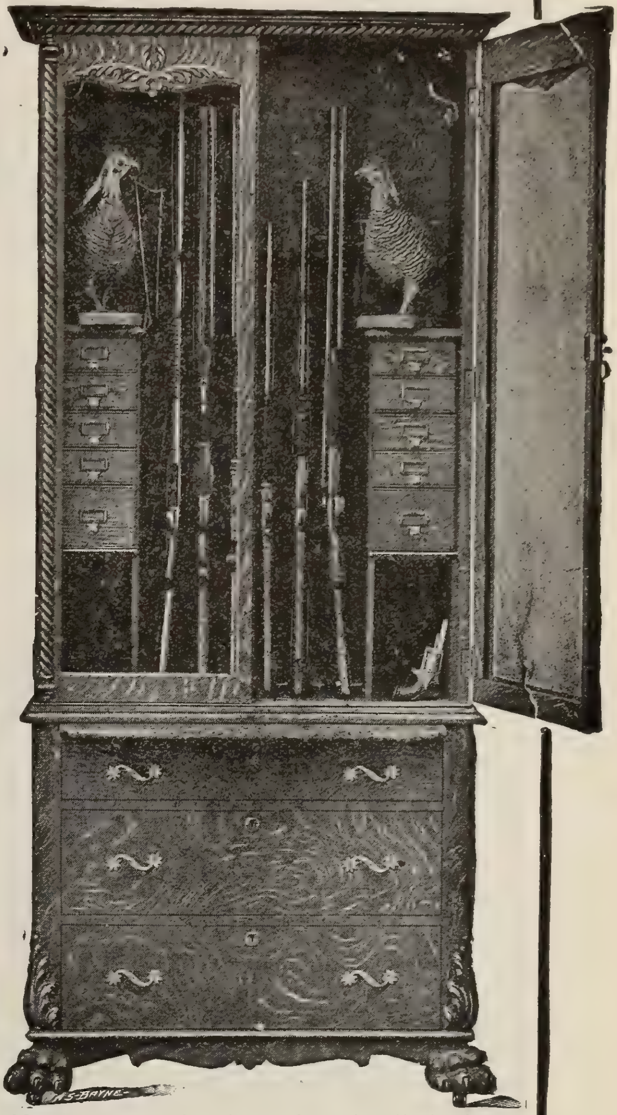

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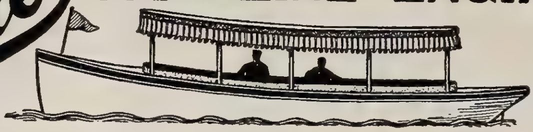

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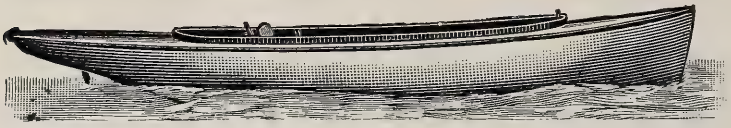

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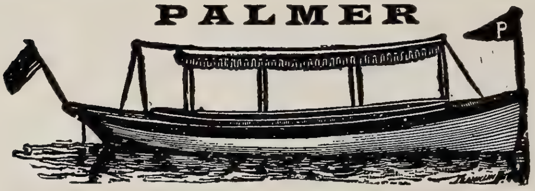

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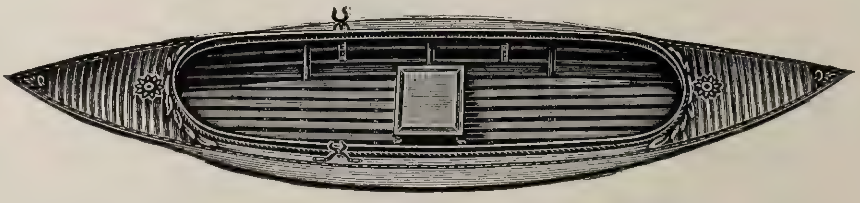

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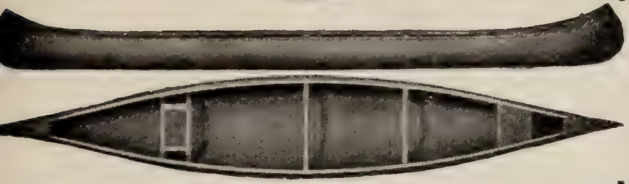

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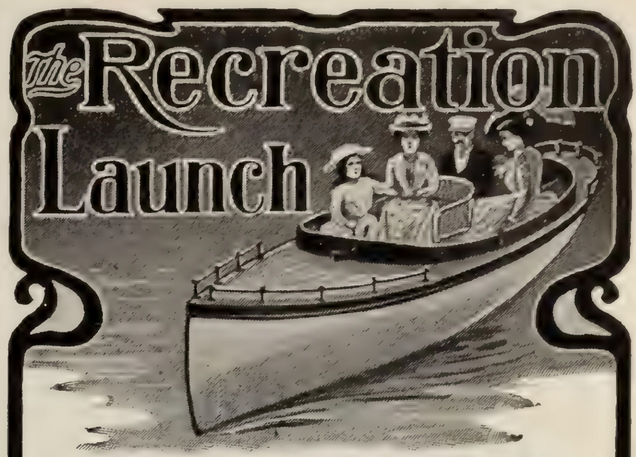

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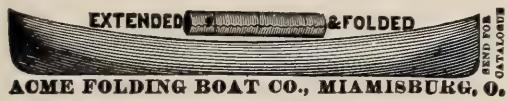

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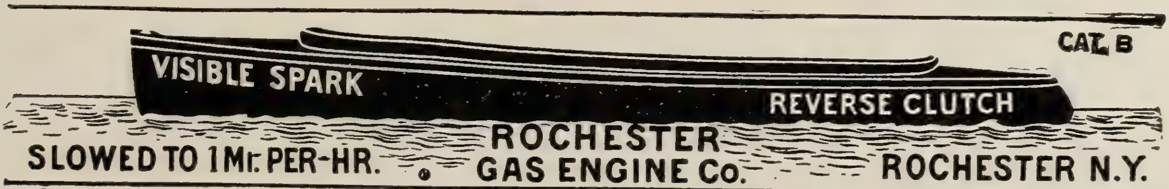
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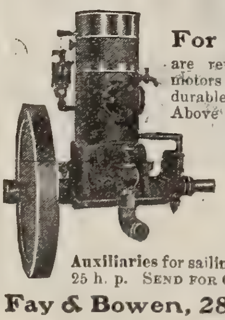

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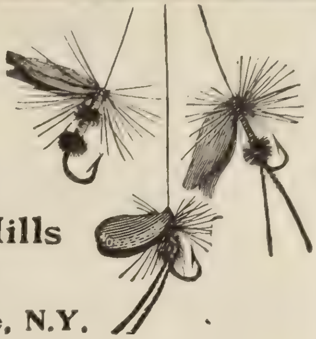

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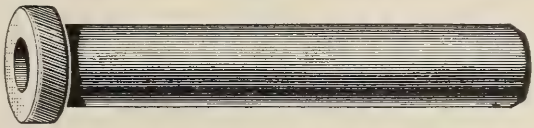

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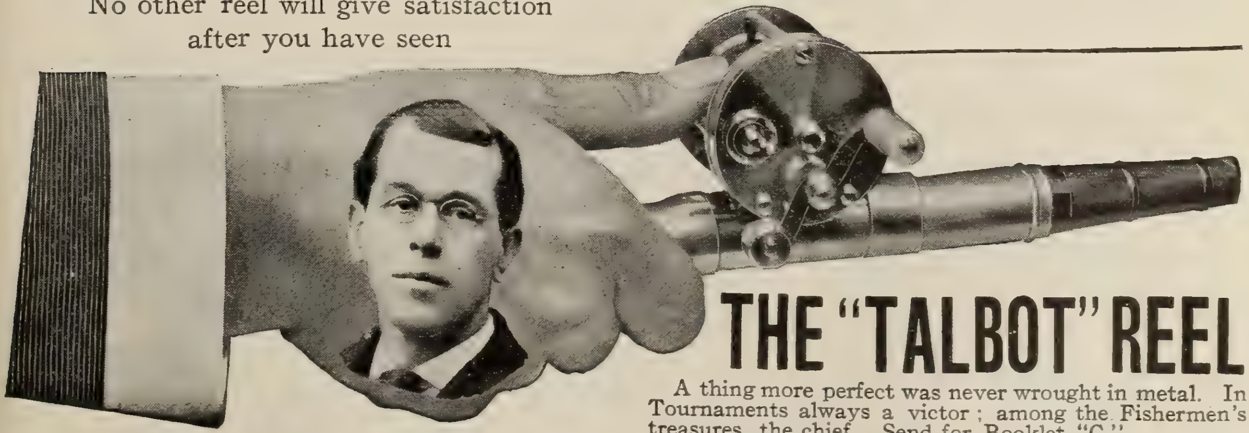

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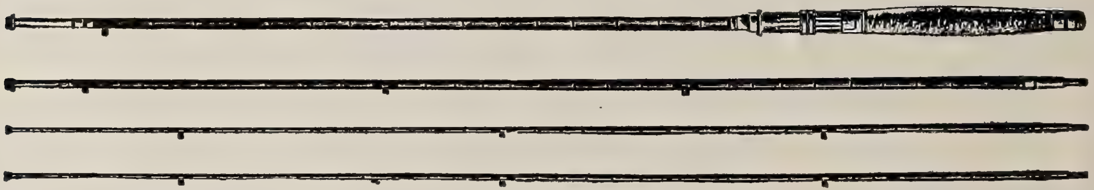

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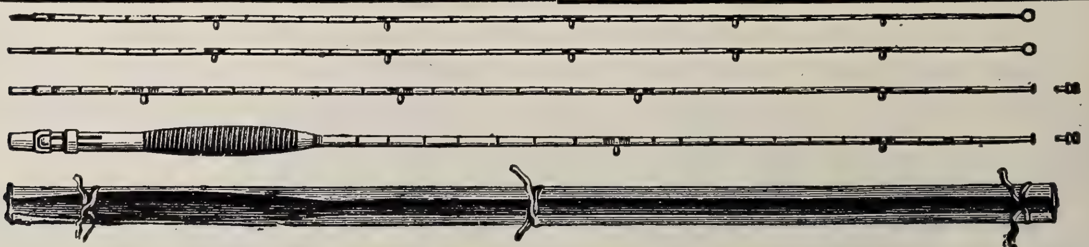

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Most convenient and compact minnow bucket made. Size reduced one-half when folded for carrying. Made in 3 sizes—the largest, as shown in illustration, has three compartments, which can be used for various kinds of bait as desired. This is a 15-quart bucket, oval in shape, and price is **$4.50.** 12-quart and 10-quart sizes, which are round, have single compartment only, and sell for **$3.00** and **$2.00.** These buckets are made of best **tin,** japanned, and of fine mesh wire. It is necessary to sink the bucket only to the level of the float, the wire mesh admits air and fresh water, keeping the bait in fine condition, which is most essential in catching game fish. There is but one **Perfect Minnow Bucket,** and that is **Hall's.** Send order or write for circular to

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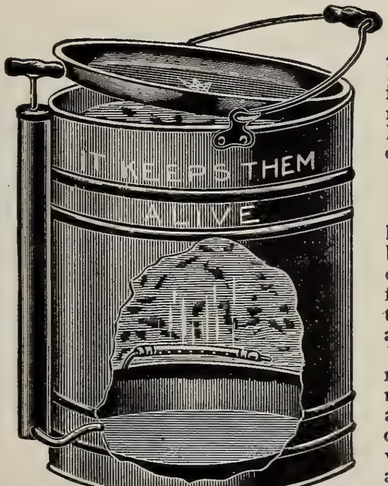
CLEVELAND, - OHIO.

Fisk's Aerating Minnow Pail



☞ The only Minnow Pail in which Minnows can be kept alive indefinitely.

Has an air chamber at the bottom holding 260 cubic inches of condensed air forced in by the Air Pump attached, and by a simple rubber attachment the air is allowed to escape into the water gradually, supplying the fish with the oxygen consumed by them. One pumping is sufficient for ten hours.

Height, 1 foot; diameter, 10 inches; weight, 7½ lbs.; water, 2½ gallons; keeps 50 to 150 minnows, according to their size.

IT KEEPS THEM ALIVE.
Price, $5 net—Sold direct.
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IS THE APPLE OF AN ANGLER'S EYE

Hand-made from the toughest wood and finest bamboo; they are superior to all others. Cost a little more, perhaps, but are not so expensive as cheap rods that break with little use. A true sportsman is never quite satisfied with anything short of the best. Send for catalog.

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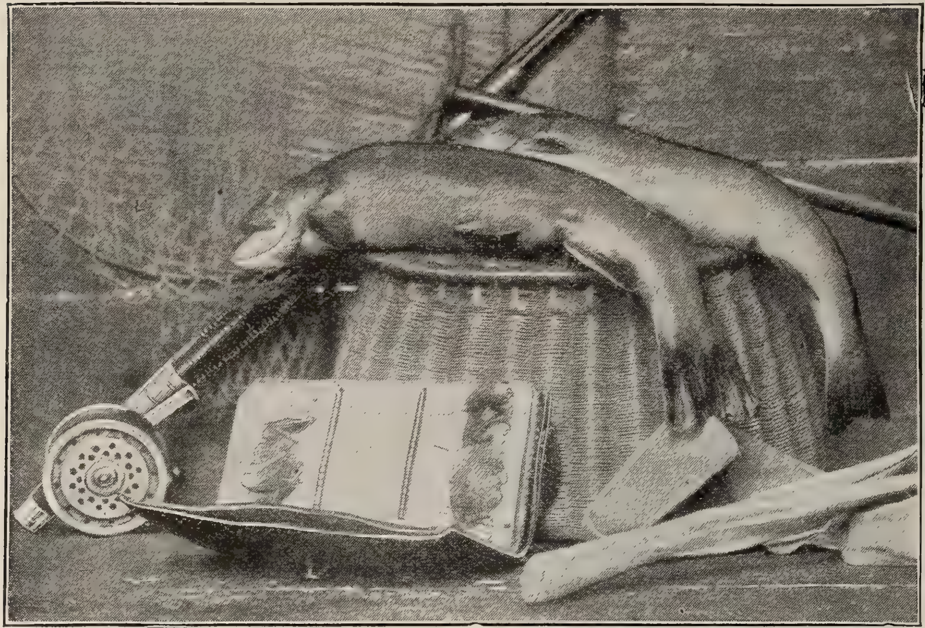

No slack line—

—when fish is hooked, the little finger instantly releases spring, which winds the line automatically. This continual pull prevents fish from dislodging hook from his mouth and in the end will always tire him out. When once hooked, he's your fish. Reel can be made free-running for casting.

"The Automatic Reel did it." (Caught by H. H. Fraser, St. Johns, N. F.)

Little finger does it.☞

Prizes Ask any sporting goods dealer for Booklet "X" giving full particulars of our great prize offer to fishermen, or send direct to

Yawman & Erbe Mfg. Co., Rochester, N. Y.

$500 in Cash and Diamond Prizes

For Record Bait-Casting.

You can enter the great Shakespeare Bait-casting Tournament without expense, make all your trials at your own home and win some of the magnificent prizes offered each month this season, for the longest bait-cast. Many beginners can equal professionals the first month and win prizes and break the world's records.

$100 in Prizes for Largest Fish

Write me to-day. The New Shakespeare Reel meets the wants of the critical fisherman whose purse is limited. It is the highest grade reel on the market and none sold at twice the price can touch it. Shakespeare Reels and Baits are sent free on trial, express charges prepaid, to any angler who sends name and address. The Shakespeare Revolution Bait makes the biggest black bass strike when no other bait—live minnows or frogs—can tempt him. They catch big strings of fish for people who never caught fish before. In the water they struggle as if alive and attract game fish from many yards away. Write to-day and try them free of all expense to you.

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130 Shakespeare Bldg., Kalamazoo, Mich.
My reels and baits are for sale by all first-class dealers.

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Following are names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

If anyone who may employ one of these guides should find him incompetent or unsatisfactory, I will be grateful if he will report the fact to me.

FLORIDA.

Carson Bros., Frostproof, bear, deer, turkeys, quail snipe.

IDAHO.

John Ching, Kilgore, elk, bear, deer, antelope, mountain sheep, trout and grouse.
R. W. Rock, Lake, ditto

MAINE.

W. C. Holt, Hanover, moose, caribou, deer, grouse, and trout.
H. R. Horton, Flagstaff, bear, moose, fox, grouse and trout.

MONTANA.

James Blair, Lakeview, elk, bear, deer, trout and grouse.
A. T. Leeds, Darby, ditto
Chas. Marble, Chestnut, ditto

OREGON,

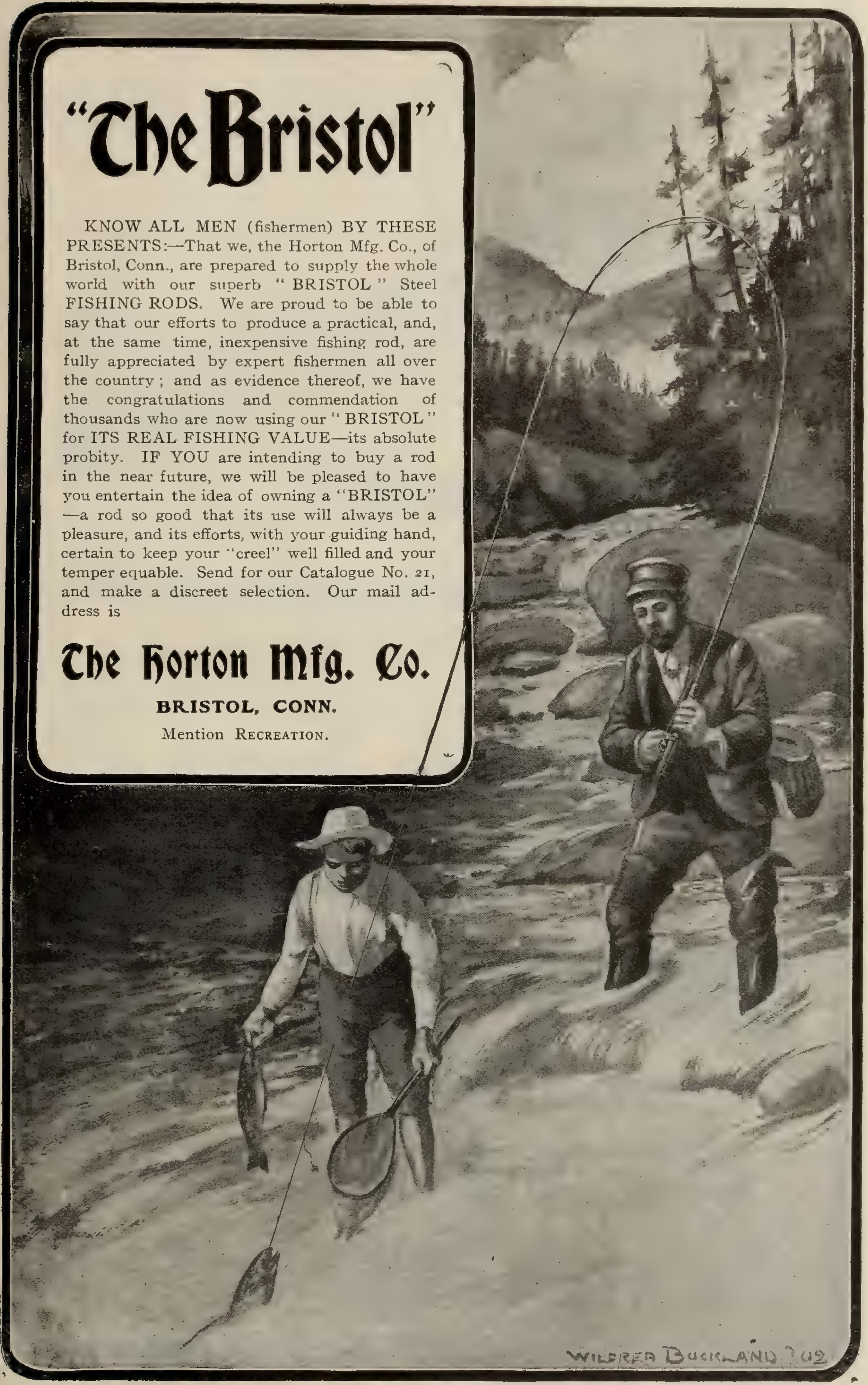
W. H. Boren, Camas Valley, Douglas Co., deer grouse and trout.

WYOMING.

Frank L. Peterson, Jackson, elk, bear, deer, mountain sheep, antelope, grouse and trout.
S. N. Leek, Jackson, ditto
James L. McLaughlin, Valley, elk, bear, deer, mountain sheep, antelope, grouse and trout.

CANADA.

W. A. Brewster, Banff, Rocky Mountain Park, Can., bear, sheep, goats, grouse and trout.
Wm. S. Andrews, Lillooet, B. C., deer, bear, mountain sheep, goats, grouse and trout.
B. Norrad, Boieztown, B. C., moose, caribou, grouse and trout.



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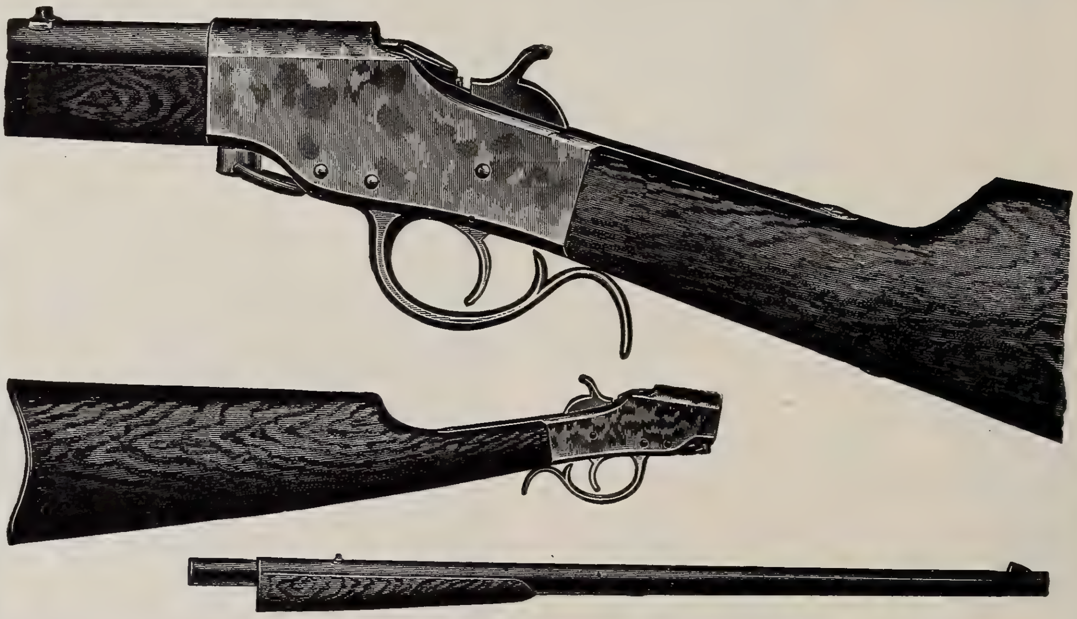
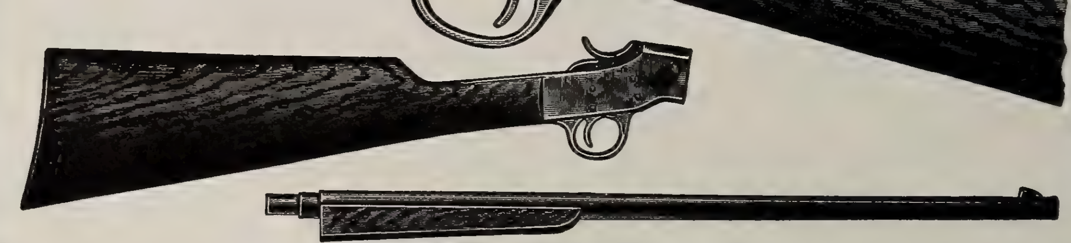


No. 822.—Lever Action, case hardened, walnut stock, rubber butt plate, weight 4 pounds, 20-inch barrel, for 22 R. F. long or short cartridges. **$4.50**



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We will ship, all charges prepaid, on receipt of remittance with order, to any express office in the U. S. A. We agree to refund your money if you are not satisfied, provided you will agree to mail us a target made with the rifle we send you. Order while this offer is open.

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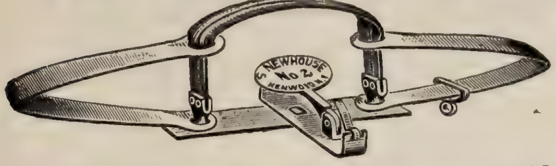

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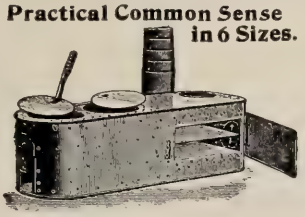

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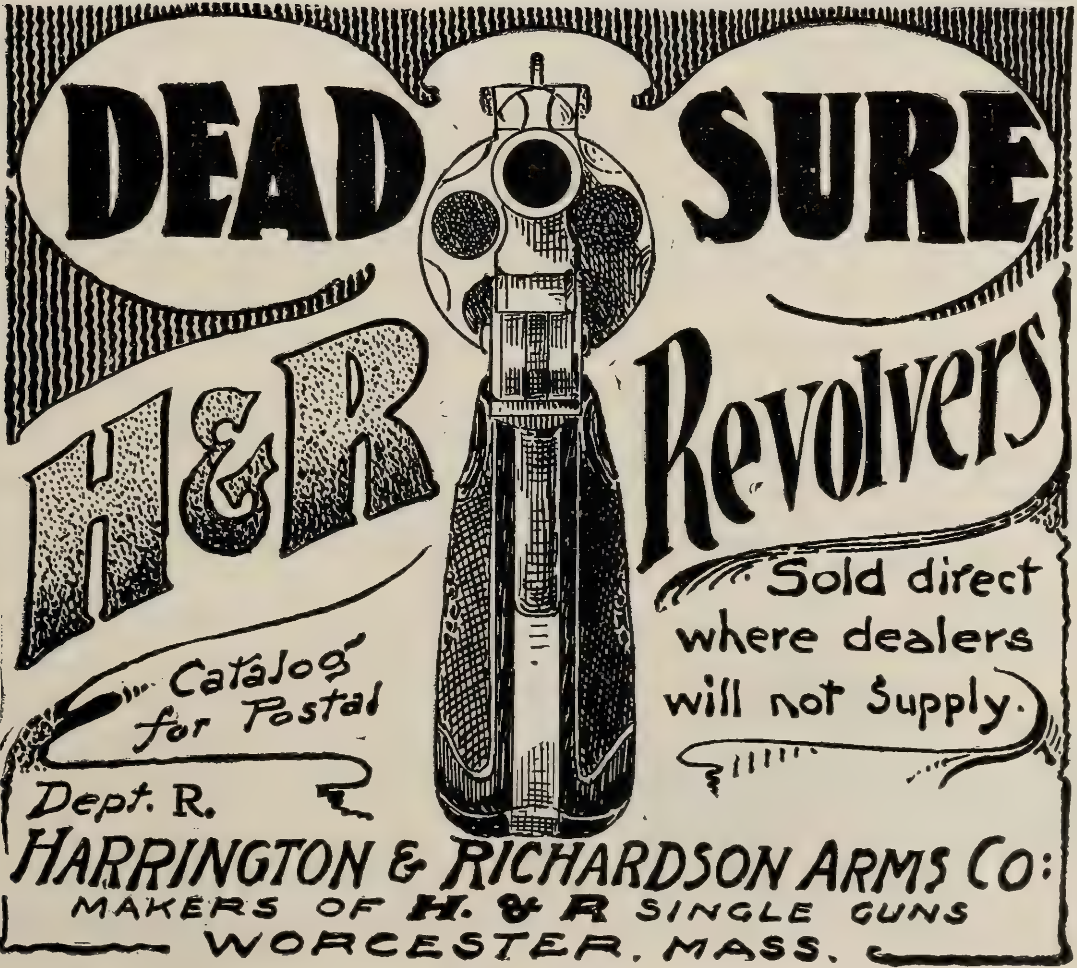

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"Guildy or nod guildy?" demanded the justice.

"Not guilty, your honor."

"Den go avay. Vat you vand here? Go apoud your bishness!"

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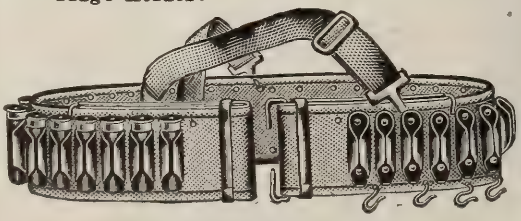
The best of all. Delivered by mail to any address on receipt of $2. Send 10 cents in silver or stamps for Sample Cartridge Holder.



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My mother, who is 50 years old, and who never fired a gun in her life, likes RECREATION as well as I, and we nearly quarrel over it when it first comes in the house. My only brother, now in California, used to say, when he saw me plunge into a copy of RECREATION, old or new, "Now he is going to study his Bible."

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The West End gun cabinet arrived safe and is a beauty. It is useful as well as ornamental, and I thank you for your generosity. C. C. Vincent, Rochester, N. Y.

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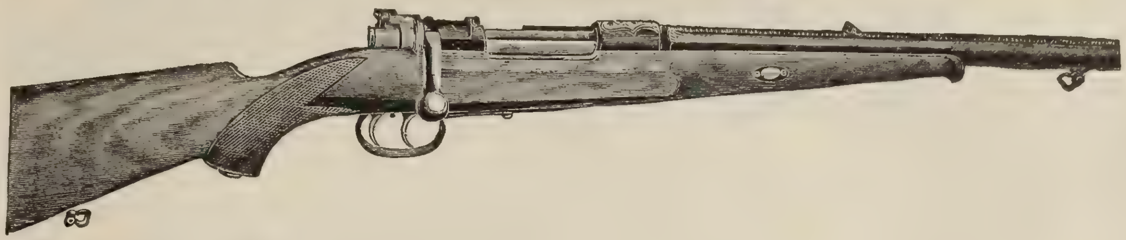

8 mm. Mauser System, Extra Fine Hand Finish, Selected Walnut Pistol Grip Stock, Raised Matted Rib, Double Set Trigger, Latest Action. Made by Sauer & Sohn,	**$50.00**
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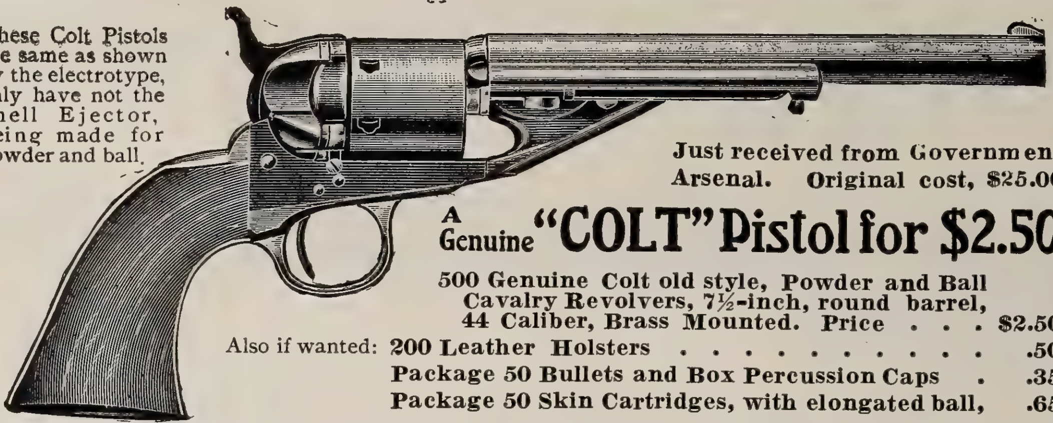

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Just received from Government Arsenal. Original cost, $25.00

A Genuine "COLT" Pistol for $2.50

500 Genuine Colt old style, Powder and Ball Cavalry Revolvers, 7½-inch, round barrel, 44 Caliber, Brass Mounted. Price . . . $2.50

Also if wanted: **200 Leather Holsters 50**

Package 50 Bullets and Box Percussion Caps . .35

Package 50 Skin Cartridges, with elongated ball, .65

These Pistols are in nice second condition, almost as good as new. At the time of our Civil War were the most famous weapons of all. Are valuable, not only as relics of our Civil War, but as accurate shooting pistols for target or defense, and all right for use to-day. Orders accompanied by cash will be filled in rotation, and if goods are not satisfactory on receipt, they can be returned and money refunded, less cost of expressage.

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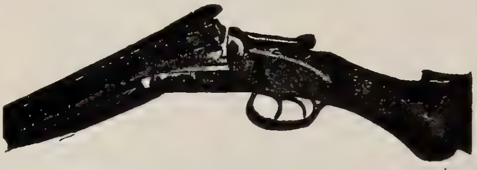

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I am 11 years old and a reader of your valuable magazine. This is how I got my dollar to pay my subscription. I got my collarbone broken in wrestling, so I had to quit school. One day mamma wanted a chicken and I could not run it down, so I told her I would shoot one with my 22. She said I could not hit the side of the barn. I told her I could kill a chicken with my rifle, with my left hand at that. She said she would give me all the money she had in her purse, which was 80 cents, if I did. I took my 22 out, drew a bead on a rooster's head and shot both eyes out. Still I did not have enough money. One day a man came along and wanted some oats, so I sold him 20 cents' worth. How is that for a Western lad?

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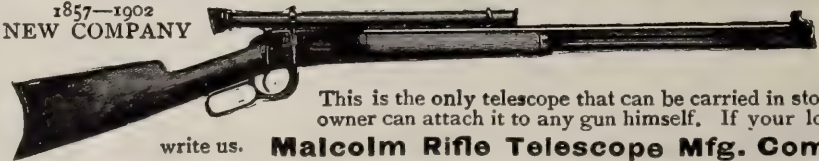

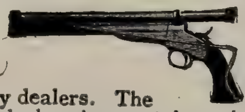

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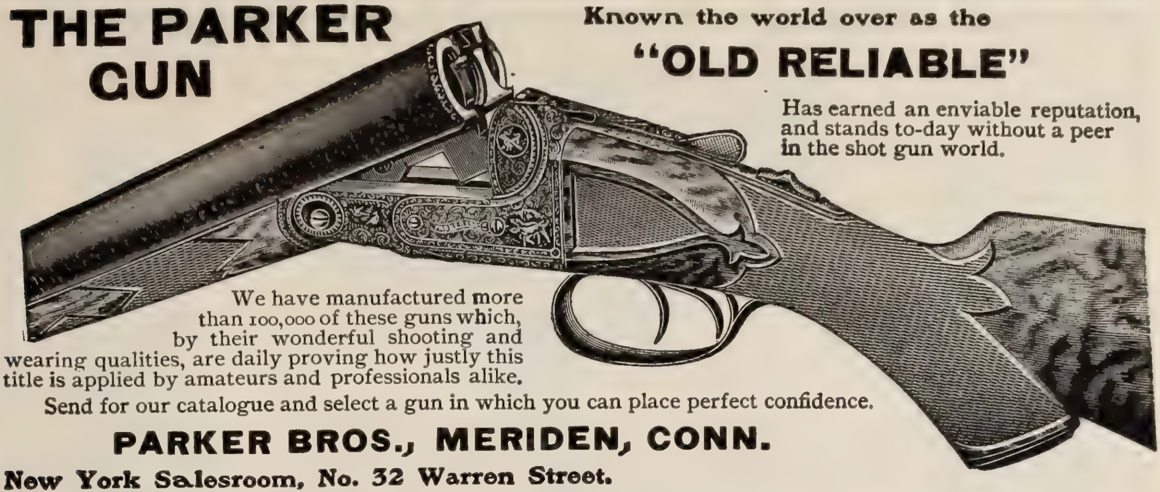

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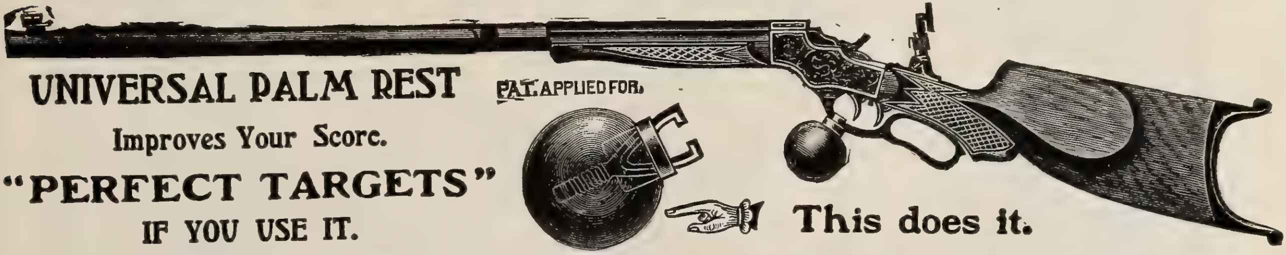

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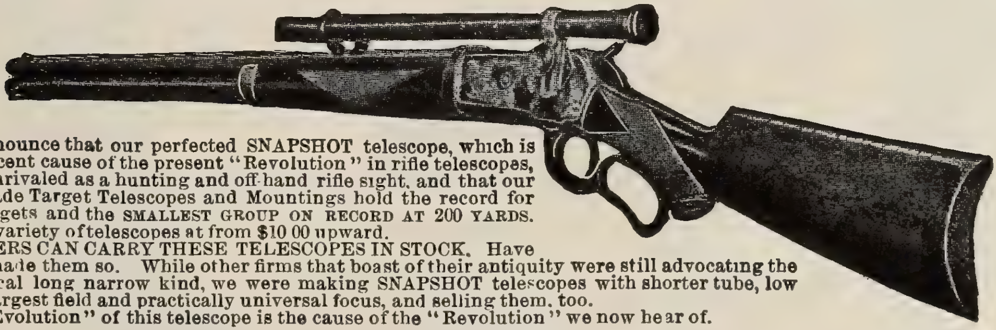

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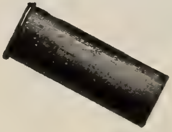

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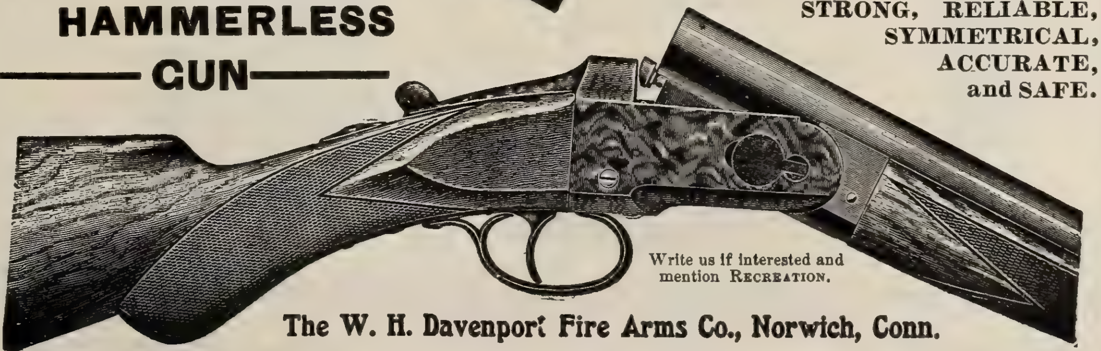

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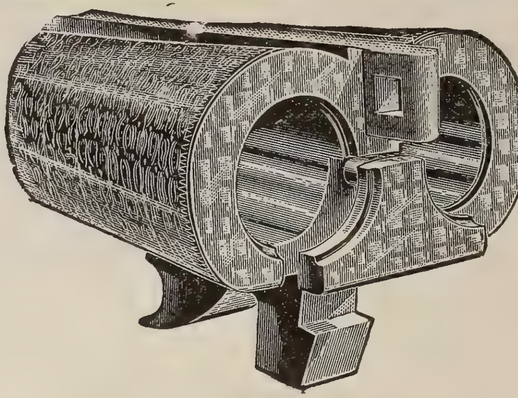

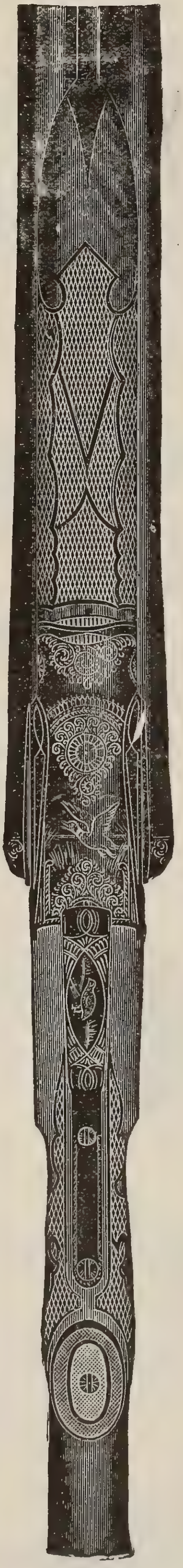

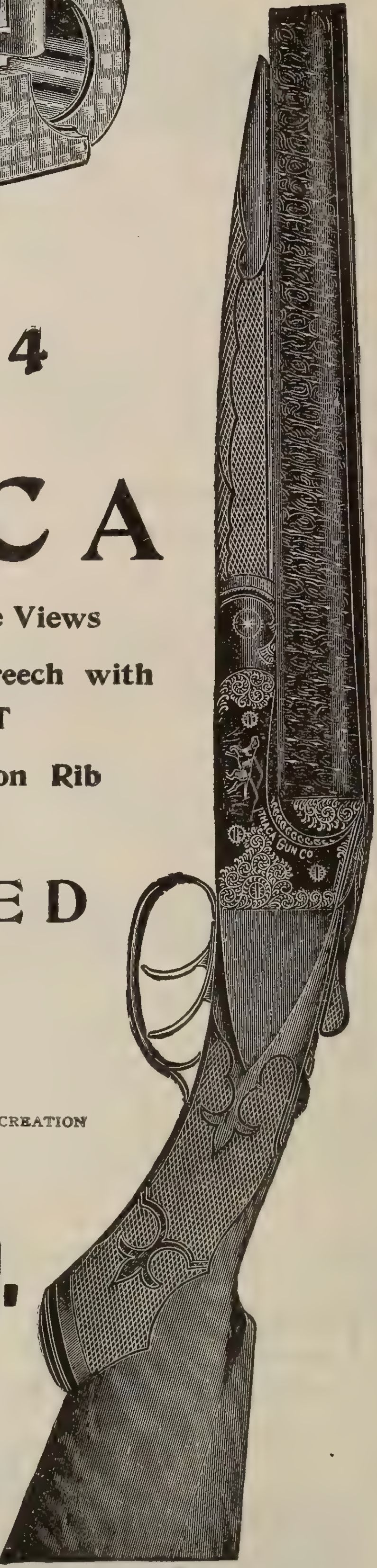

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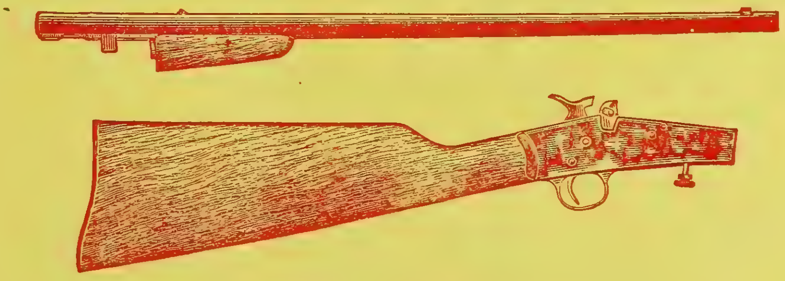

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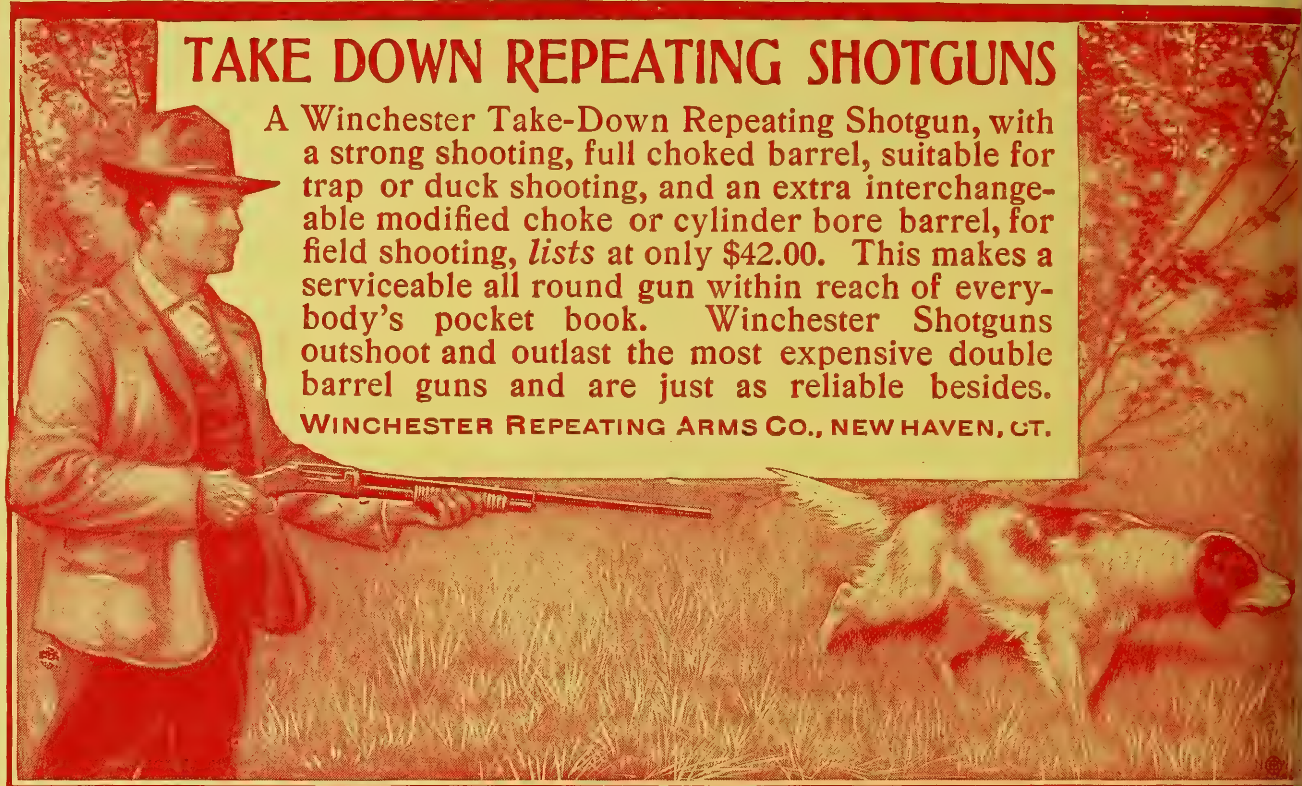

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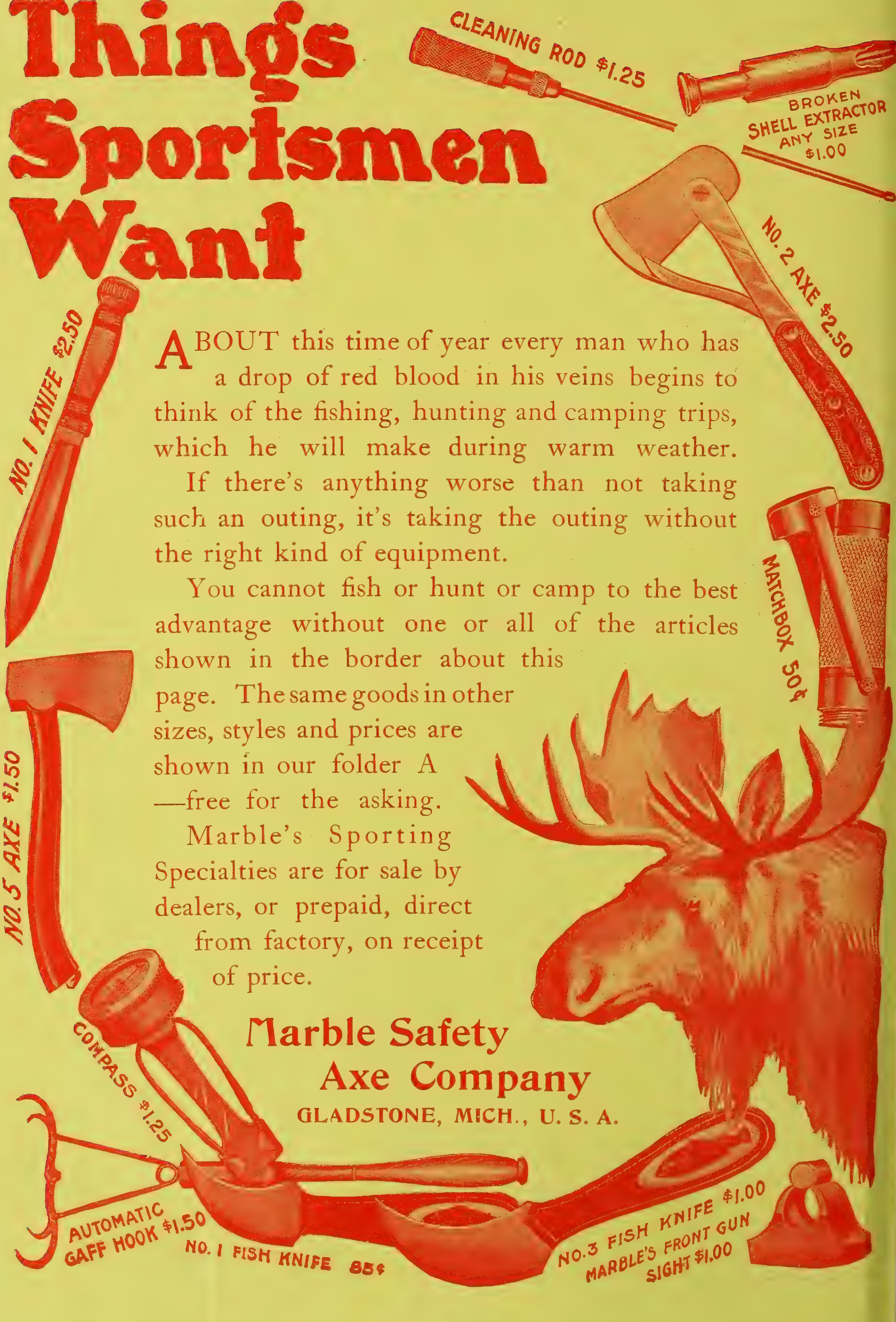
Things Sportsmen Want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CONTENTS OF THIS NUMBER

I Saw Above Them an Eagle. Carl Rungius........ FRONTISPIECE

PAGE

A Feathered Hunter. Illustrated........ L. B. STORER 413
A Bear and a Caribou. Illustrated........ GREENHORN 415
A Mountain Lullaby. Poem........ HATTIE H. LOUTHAN 417
Partridge Shooting in India........ C. E. ASHBURNER 418
One Dolly Varden. Illustrated........ LOUIS AKIN 419
The Foundling. Poem........ Rev. E. L. TIFFANY 420
Canoeing on the Michigamme........ C. E. BERRY 421
June Days on the Upper Pecos. Illustrated........ EDWARD G. TAYLOR 423
The Ol' Mill Pond. Poem........ GEORGE W. SLAWSON 427
A Trip to the Olympics........ W. S. JONES 428
Spring Voices. Poem........ A. M'ELRATH 430
Held Up By Moonshiners........ J. E. ALLEN 431
Fishin' In De Ole Maine Woods. Poem. Illustrated........ EDWARD BOURNE 434
What Becomes of the Horns? Illustrated........ M. A. WILCOX 436
Winter Blooming Huckleberry. Illustrated........ C. E. PLEAS 437
When the Perch Begin t' Bite. Poem........ W. M. SCHULTZ 437
Sheep or Goat? Illustrated........ FRANK MELVIN 438
A Prominent Game Protectionist. Illustrated........ 439
The Fiery Grotto. Poem........ Dr. L. E. HOLMES 439

From the Game Fields........ 443
Fish and Fishing........ 454
Guns and Ammunition........ 457
Natural History........ 463
The League of American Sportsmen........ 467
Forestry........ 473
Pure and Impure Foods........ 475
Book Notices........ 478
Publisher's Notes........ 479
Editor's Corner........ 480
Amateur Photography........ 485

Entered as Second-Class Matter at New York Post-Office, Oct. 17, 1894.

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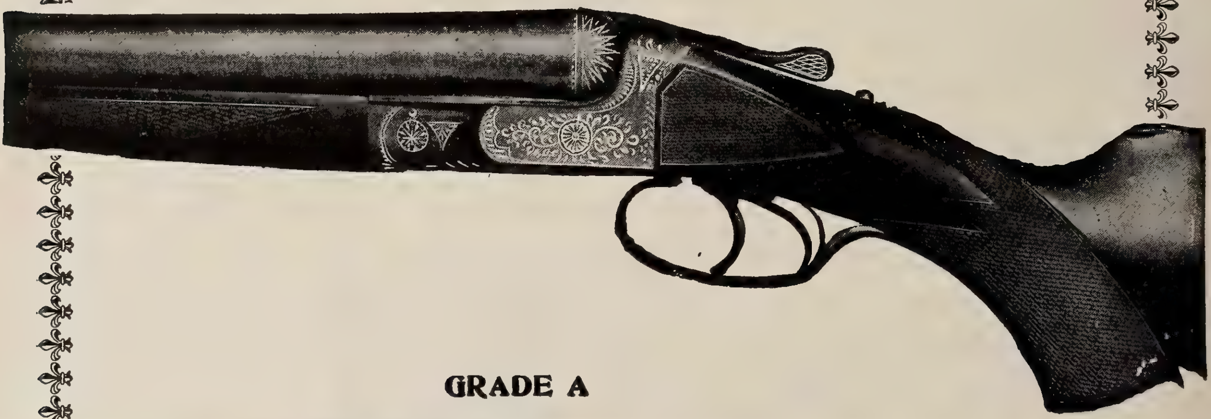

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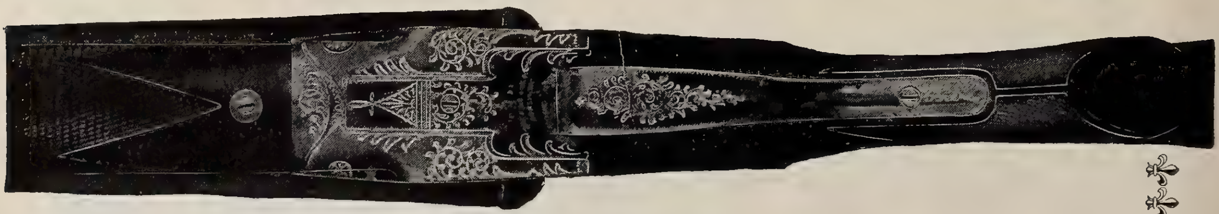

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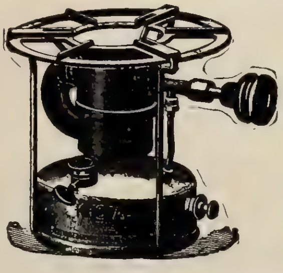

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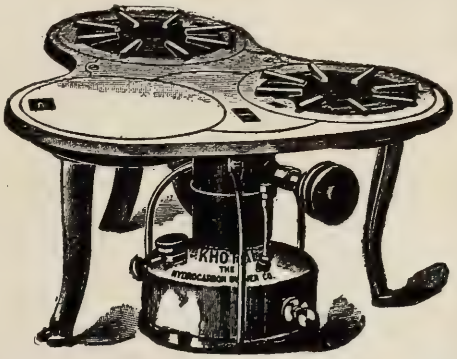

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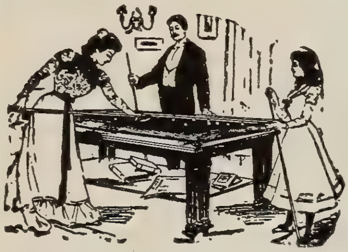

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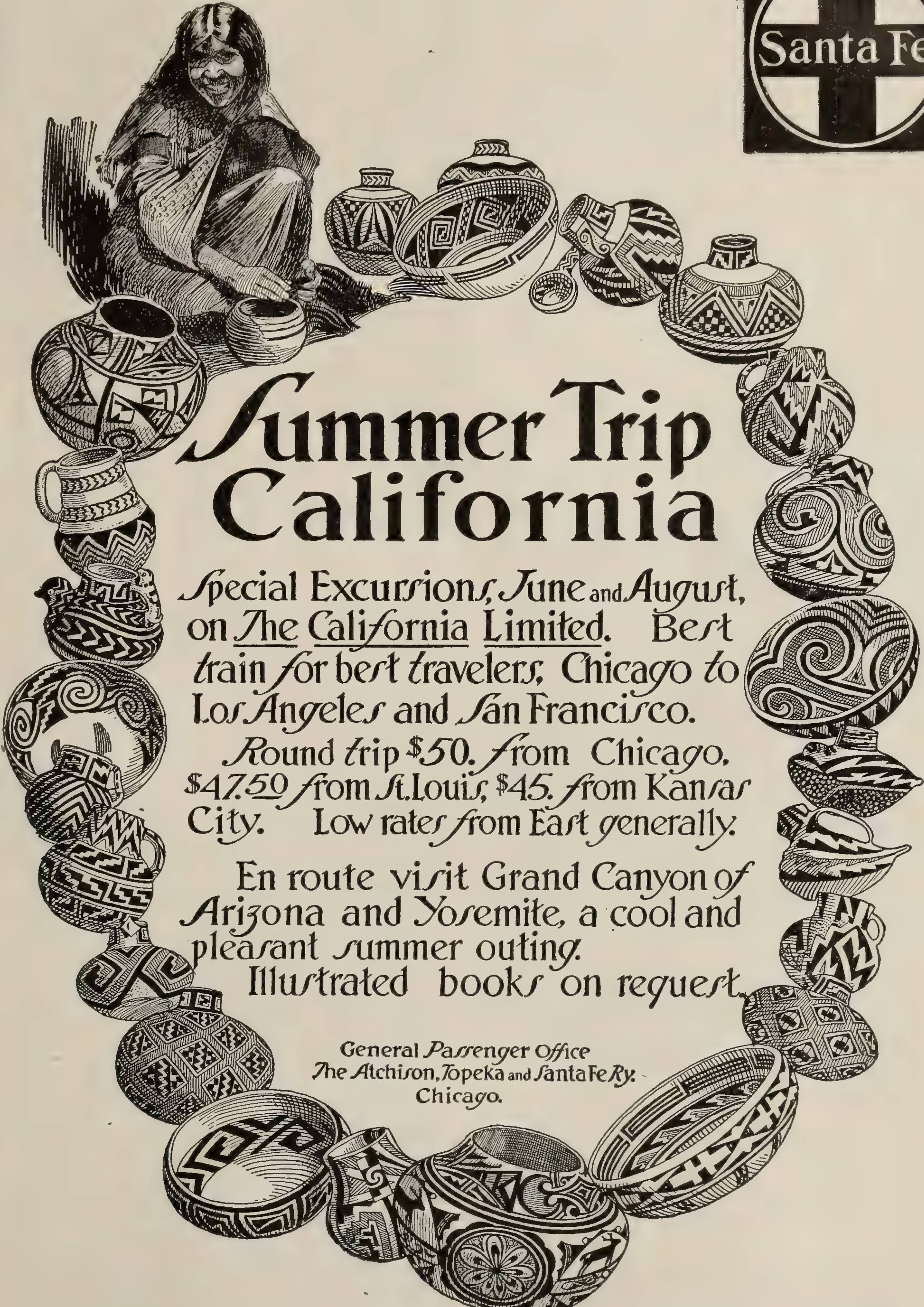

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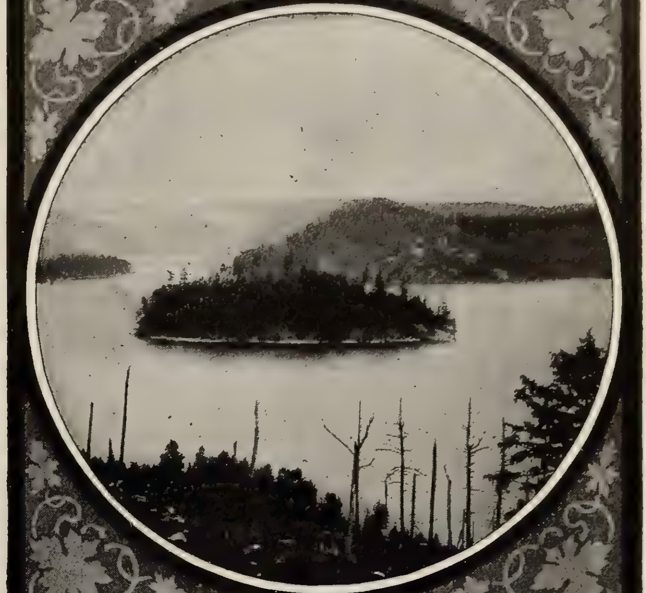

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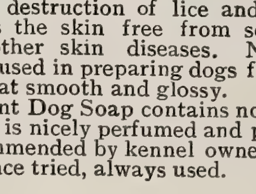

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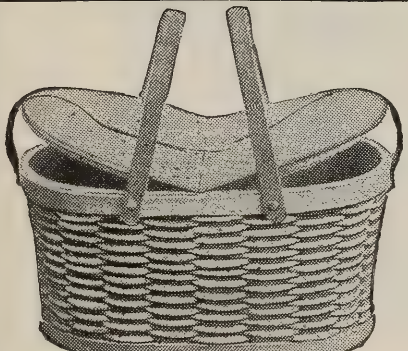

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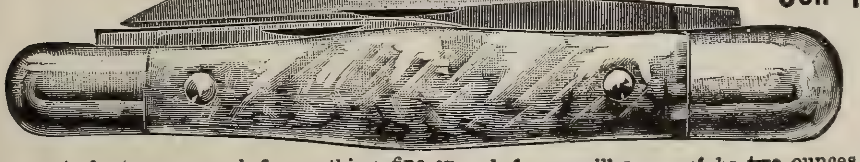

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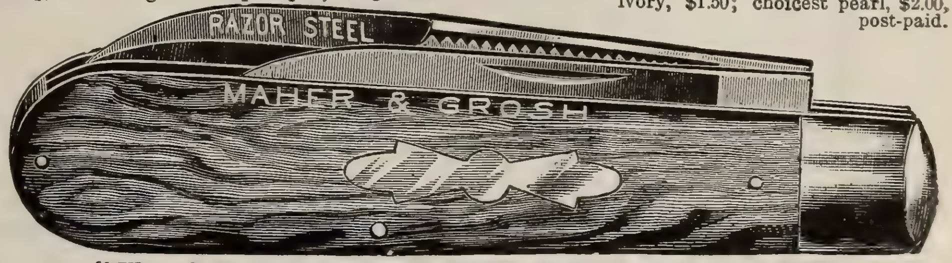

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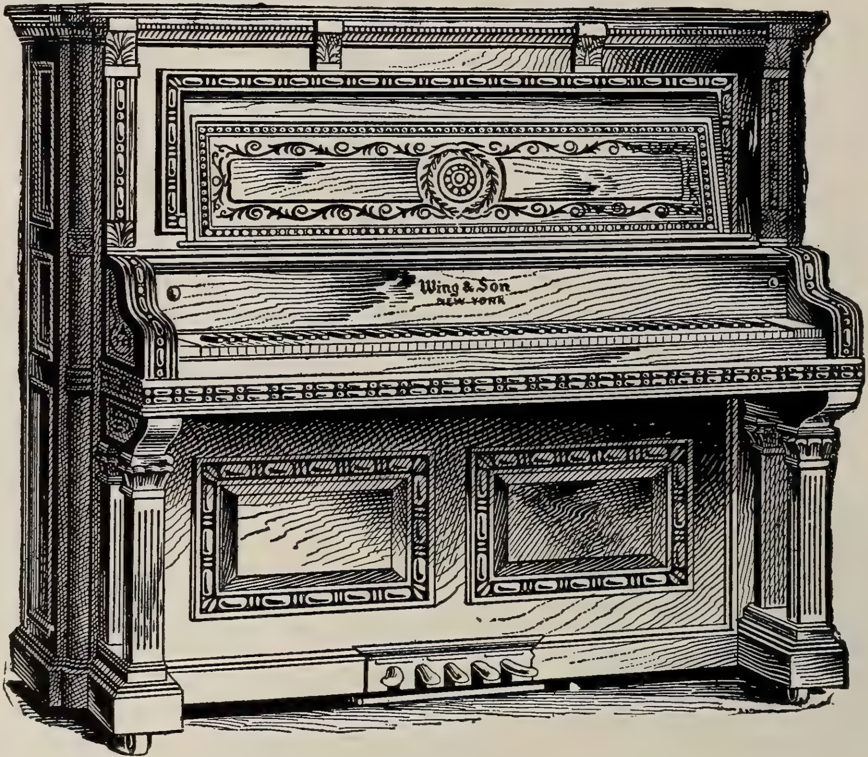

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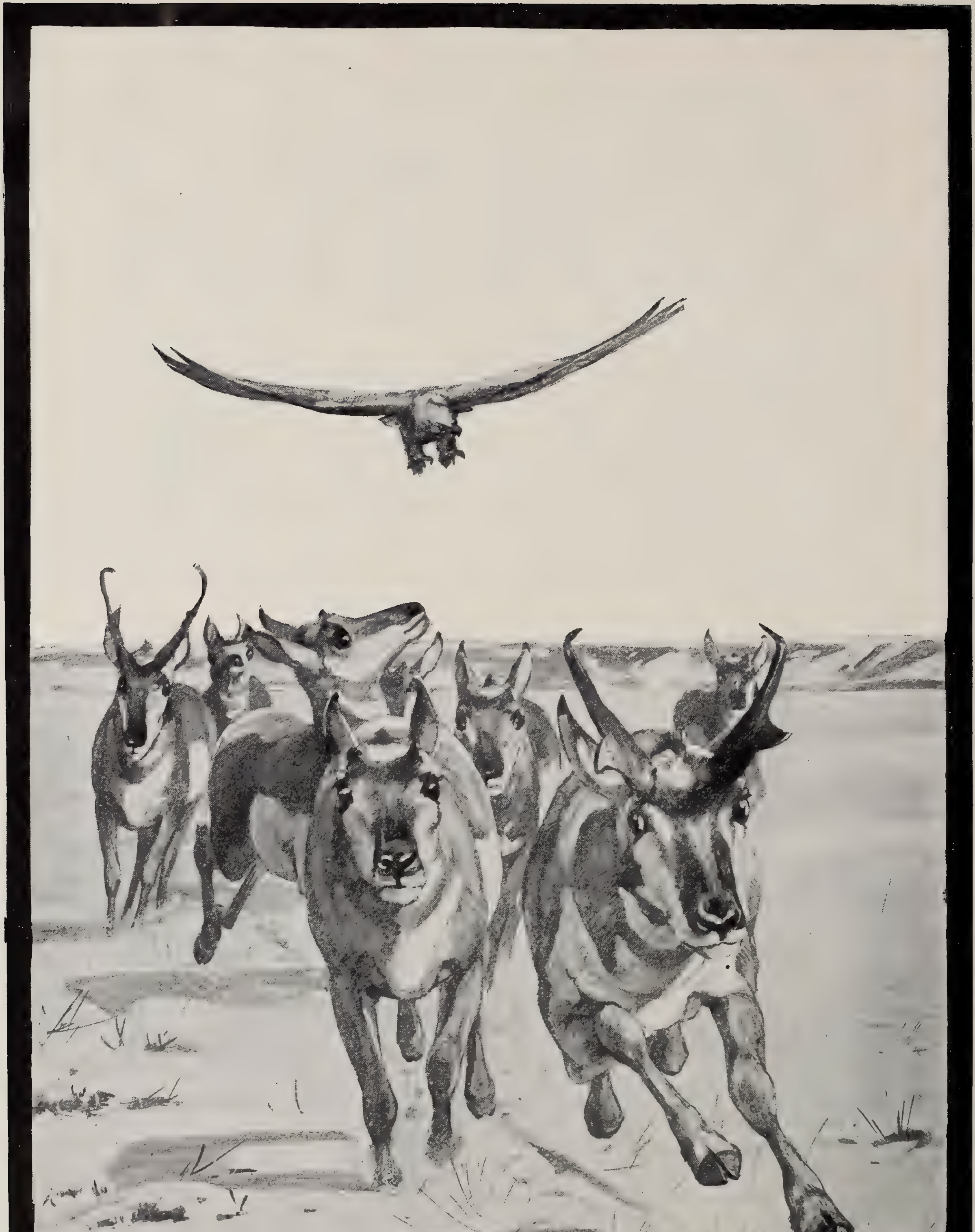


I SAW ABOVE THEM AN EAGLE.

RECREATION

Volume XVI. JUNE, 1902. Number 6.

G. O. SHIELDS (COQUINA), Editor and Manager

A FEATHERED HUNTER.

L. B. STORER.

One bright day in the winter of 1880 the foreman of a ranch in Southwestern Nebraska sent me in search of game to replenish our meat supply. There were plenty of antelope in that country then and no one had yet thought to call a halt on the hunters and ranchmen who were killing them off. That was before the days of RECREATION and the L. A. S., and so we had not learned to look ahead. Now there is scarcely a wild antelope in the whole State of Nebraska. We supposed the game would last as long as we did, and neither thought nor cared whether the next generation should get sight of an antelope or not.

An hour's tramp over the rolling prairie brought me near the top of a sharp ridge. Removing my hat, I crept cautiously to the summit and located a band of 8 antelope. They were about half a mile away and were feeding directly toward me. There were a few inches of snow on the ground. As the wind was favorable and I was completely hidden from their sight, I felt reasonably sure of my game. They had not seen me and knew nothing of the dangers that lurked about them.

The animals finally approached within 300 yards of me when they suddenly bunched and started on a run in the direction whence they had come. They ran some distance before I discovered the cause of the stampede. Then I saw, about 10 feet behind and about the same distance above them, an eagle. For half a mile he pursued them, maintaining his position perfectly, and I could not see that he varied an inch. The antelope were just touching the high places and were getting far away, but, watching them through my field glass, I saw the eagle swoop. One antelope left the band; the great bird followed him, and for a moment both disappeared from sight. Then they emerged from the swale and started up the opposite ridge. The eagle had gained on its prey until now it was directly over the poor beast. The race was neck and neck, with the odds all in favor of the cruel bird.

Finally he folded his wings and dropped like a chunk of lead on the antelope's neck. The latter fell, apparently stunned by the blow. Then there was a struggle, during which the terror stricken quarry several times rose to his feet; but the bird's talons were sunk deep in his neck and the life blood was flowing rapidly. The great bird pounded the antelope with its mighty wings and apparently blinded him.

I ran toward them, hoping to get a shot at the bird, but as I approached he arose, soared away and lit on a butte, a quarter of a mile distant. He had not yet had his well earned dinner, so I took only the hind quarters of the poor antelope and returned to the ranch without firing a shot.

We had all the meat we needed in the shack for the following week, and the feathered hunter had an abundant feast left for himself and several coyotes.

AMATEUR PHOTO BY H. K. JOB.

ROSY GULLS.

Winner of 31st Prize in RECREATION'S 6th Annual Photo Competition.

AMATEUR PHOTO BY MRS. F. B. KIRSCHNER.

A LODGE IN THE WILDERNESS.

Winner of 33d Prize in RECREATION'S 6th Annual Photo Competition.

A BEAR AND A CARIBOU.

GREENHORN.

In July, '99, 4 of us were camped on German creek, a tributary of Twelve Mile river, which joins the Yukon 18 miles below Dawson. We were prospecting some placer ground, which had been staked the winter before Not having had any fresh meat since April, 2 of us went hunting. About half a mile up stream we separated, one taking each side of a gulch.

I struck a moose trail; not the fresh track of an individual, but a regular highway, made and used by moose and caribou.

Every part of the Yukon country that I saw is full of these trails or runways. In some places, as, for instance, a low point in a divide between 2 creeks, the trail is over 4 feet wide, bare of moss and well beaten. In such crossings one can nearly always find good sized holes which the animals evidently make by pawing. There is a trail on the top of every ridge and in every creek bottom, in moose country; with cross trails from gulch to gulch at convenient places. They invariably follow the best ground, avoiding stony places and hummocks. Along a ridge, the best traveling is always on the moose trail. The trails in the bottoms are not so good.

On the day in question, I reached a point near the *rendezvous* without seeing game, and sat down where I had a good outlook, and could intercept my companion. After a while, a spot of brown, about half a mile up the gulch, caught my eye. Presently I saw it was a brown bear almost as big as a fat steer. My hair rose and chills chased up and down my back, for it was the first bear I had ever seen at large.

Bruin was cautiously nosing about in the high grass, continually stopping to look around. As soon as I got over my nervousness, I began to want a bear, and concluded I could safely gratify desire as I had a .30-30 Winchester carbine, and about 15 cartridges with soft point bullets.

The bear was in the bottom of the gulch above timber line, and from where I was sitting it was impossible to approach him unseen.

I slipped around a rock out of his sight, and went down hill to where the trees were thicker. There I crossed the gulch, and finally came out on the ridge directly opposite him, perhaps 150 yards distant, and down wind. However, I could not see into the gulch on account of the rounding of the hill side. I spent about 30 minutes dodging around, trying to see my game, and at last thought he had heard me and gone.

I went up stream about 200 yards and descended into the gulch. Then I moved down stream without making any noise, and turned the corners with exceeding care. Presently I came on the bear, with his head in the grass, and fired so quickly he gave no sign of having seen me. For a few seconds I could not see him either, for the recoil jabbed the long sight into my eye. If the bear had been a bad one, I should have been easy meat for him, as my right eye was in such pain that tears blinded the other. The shot landed where it was aimed, however, half way between the eye and the ear, and he sank on his belly and died.

He turned out to be a female, and small at that; perhaps 150 pounds in weight. I never could understand what made him shrink so. There was no other bear with him; the tracks proved that. A good many big bears that get away would probably pan out on the same scale, if they could be stopped.

My partner came up soon after, and we skinned the little bear and packed the meat to camp. It was *skookum muck-a-muck* (good food). However, we did not relish it so much after a few days, so we decided to take another hunting trip. Jack, who had helped me pack in the bear meat, would not go, nor would Tom; so George and I set forth. He also had a Winchester .30-30 with about 6 inches longer barrel than my carbine.

We climbed the mountain together, and took lunch in a sheltered spot. Near us a colony of marmots whistled their suspicions of our appearance, and the smell of our cooking. I was surprised to see them so far North, 65°. George shot one, to make sure, and as far as I was able to judge it was the same old soft, innocent looking, fat little Colorado prairie dog with the jerky tail. It must have been a chilly life for them, because, while the ridge on which we were lunching was practically bare, there were several small glaciers in shady places. The altitude must have been 7,000 feet or more.

After lunch we met our first ptarmigan, and I got him. Others kept bobbing up in front of us all day, often with young ones just able to fly. One hen, in trying to take my attention from her brood, permitted me to get so close that I tried to kill her with the butt of my carbine. We shot 5 only, as we were out for bigger game aud could not afford to spend ammunition on birds. We traveled along the ridge parallel with our creek, meaning to go around the head of it and return on the other side. The ground was firm and generally covered with lichens, wild flowers and a plant bearing small red berries somewhat like cranberries. Forget-me-nots were plentiful.

Everywhere we saw the peculiar footprints of caribou, and kept a sharp lookout for these animals, but without avail. At length we reached a peak opposite the head of the creek, and started down to cross the saddle connecting with the opposite ridge about a mile away. This windswept saddle hung in a gentle curve like a slack rope from ridge to ridge, and was totally devoid of cover on our side, the vegetation having a yellowish cast. I was about 400 yards in advance of George, and a little way up the opposite slope I sat down on a pile of rock to wait for him. Just as he joined me he exclaimed suddenly in the most excited manner,

"Coom awa doon off thot rock, mon! Coom doon! Luk at that moose! Kip quiet! Sit still! Coom doon, mon! Coom doon!"

I kept cool, however, and obeying his third injunction, I saw a moose walking slowly along the side of the ridge to which we were headed, taking a mouthful here and there, and apparently unaware of our presence. Soon he lay down and I ducked behind the rocks. We had by that time recognized the animal as a caribou, and we conspired for his capture.

About half way to him there was another outcrop of country rock, but we could not see our way clear to getting behind it as the ground was too open; and it would be a long shot anyhow. To the right was a hill, so backing away to lower ground we went around the hill and down into the timber of the gulch beyond it, which we had observed to lead directly to the game. Coming up the gulch we could see him lying in the same place, and kept behind the trees until they thinned out so we had to go on hands and knees through the hardhack. As we were crawling along we crossed a huge bear track, and quite fresh; but we had plenty of that kind of meat in camp, and kept on. When we got within about 200 yards of our quarry, some rising ground favored us and we stood up to rest our knees.

Sneaking along quietly, we got within about fifty yards,but the rising ground had become steep, and we were in a quandary. After further consultation, we decided to rush him, and up we went, puffing like lo-

AMATEUR PHOTO BY GEO. G. CANTWELL.

AFTER LUNCH WE MET OUR FIRST PTARMIGAN.

comotives. We came in sight of him at about my favorite distance, 39 feet and 11 inches. He had just got up and was about to sneak off. I fired first and struck a large knot on a bush. George fired and punched both the animal's ears, making him shake his head. It was then up to me, and I reckoned it was time to quit fancy shooting and get that meat; so I held on his shoulders and he was ours. Then we sat down to get our wind.

The caribou was a bull, with large, symmetrical horns in the velvet. Part of his old hair was clinging to him in patches, giving him a seedy appearance. The new hair was glossy black, and as short sa that of a horse. We found the bullet in his pine. We cut him in 2 just North of the diaphragm, leaving the hide on.

While I was preparing lunch George was annoyed by a small animal in the slide rock just above him, which gave a "fell screech" at frequent intervals. He shot it and I was able to tell him that it was a little chief hare. I had never seen one, but remembered a photograph of one in RECREATION some time before.

We had a packstrap and slung the hindquarters of the caribou, heels up. It was a heavy pack, about 125 pounds, and we relieved each other every mile, reaching camp in about 3 hours, dead beat.

The fat on that buck's rump was fully 1½ inches thick, and ran up his back in a pad about 10 inches wide. There was so much of it that we used nothing else for frying the meat while it lasted, which was a week. The meat we dusted with pepper to keep off the blow flies, and it proved efficacious.

We built a bake oven and had a famous roast; we fried the meat, we broiled it; we ate it as often as we could find room for it, and it was the finest meat I ever tasted.

A MOUNTAIN LULLABY.

HATTIE H. LOUTHAN.

Over the range in the shadowy West,
Bringing you rest,
Safe in your nest,
Dream-birds come droning you here on my breast,
Hush-a-bys soothing and strange.
The sun has rolled over the rim high and steep,
Star-eyes with baby are playing bo peep,
Wide-awake cares are beginning to creep
Over the range, far over the range.

Over the range, in her snug silver nest,
Sinking to rest,
Low in the West,
Softly the moon, with her hands on her breast,
Joins in the songs sweet and strange.
The wind tucks the clouds round the peaks cold and bare,
Sleepily kisses the colombine fair,
Then drifts the day with its trouble and care,
Over the range, far over the range.

Over the range, at the Night Queen's behest,
Dark'ning the crest,
Far in the West,
Old Mother Sleep, in her slumber-robe dressed,
Comes, bringing Shadow and Change.
Softly they smother the sunset so bright,
Slowly the candles of heaven they light,
Sweetly they beckon the lingering night
Over the range, from over the range.

PARTRIDGE SHOOTING IN INDIA.

C. E. ASHBURNER.

A year or two ago Dr. W. O. Blaisdell, of Macomb, Ill., imported some chikor partridges from Kurachee, in Sind; also some black partridges. The former are, I believe, now thriving in the vicinity of Macomb, but the latter have from various causes come to untimely ends. There is nothing to prevent black partridges from doing well in the States, as they are numerous in the Southeast of Europe and in Asia Minor. The francolin is to my mind the most beautiful and most gamy-looking bird in existence. They lie well to the dog, when flushed rise straight up 25 or 30 feet, and then fly like bullets. I am surprised that none of the shooting clubs or owners of game preserves in America have tried to introduce this bird. It would be far better game than Bob White.

The francolin could be shipped from the Southeast of Europe with little risk; but can not be brought through the Red sea without immense mortality. This is caused, I think, by the difficulty of getting the birds watered several times a day, and of preventing the sailors from deluging them with salt water when washing decks. On these occasions the drinking vessels provided for the birds are filled with salt water, and no one thinks of emptying and refilling them with fresh water. They are generally placed in charge of the ship's butcher; and water is water in his opinion, whether salt or fresh. Having made many voyages to and from the East I speak whereof I know.

Some time ago, while on a visit at Mussoorie, I was told by a friend that he had seen a large number of chikor near the Jumna suspension bridge, about 10 miles out of Mussoorie.

A few days later saw me on my way to Chakatra. On my arrival at Lohari, on the right bank of the Jumna, I sent for the headman of the village to enquire from him the most likely place to find chikor. He consented to take me to a place somewhat lower down the river, where he said they were fairly plentiful.

These headmen are slow going, and the day was nearly gone before we got to our ground. We sent the beaters up the hill about a mile, and ordered them to beat carefully down to where we stood. The beat was the face of a rocky hill, studded here and there with clumps of blackberry bushes. The first thing to put in an appearance was a cock kalij pheasant, which I failed to bag. I had scarcely reloaded when a covey of chikor were flushed, and came like rockets down the hill toward me. Of these I bagged 3 with my 2 barrels. By that time it was dusk, and I determined to wait until morning.

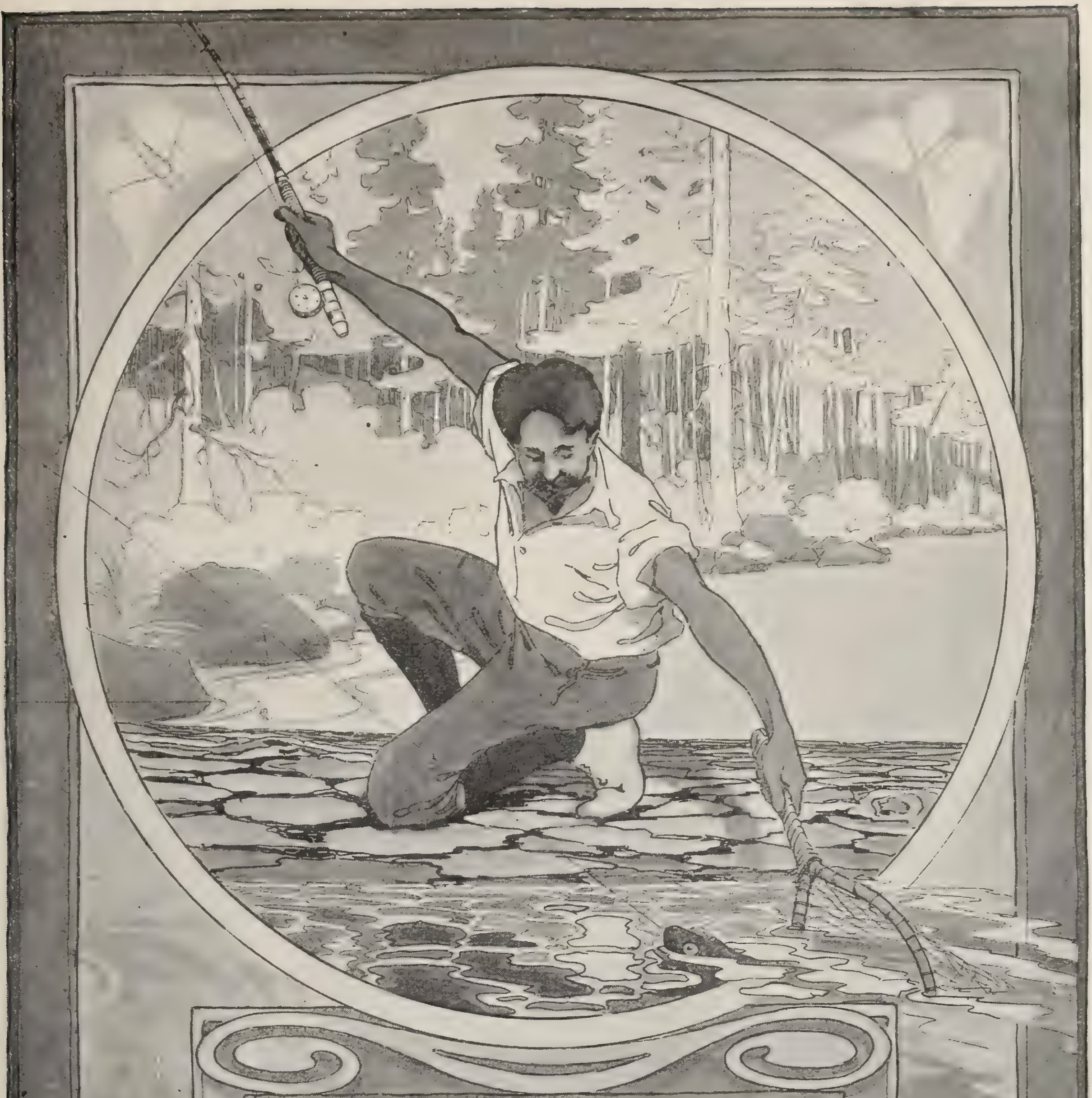
I camped in the vicinity, and next morning started out early, having sent my shikari with some beaters on ahead to mark the whereabouts of the chikors. The birds are easily found, as they invariably begin the morning with their peculiar cry "kuk-kuk-chukak." After a long walk I found my men squatting and smoking on the top of a hill. Then came the usual wrangle as to the best way to beat the ground; each man having a different plan. I ordered them to wait where they were until I posted myself about half a mile lower down, when they were to beat toward me.

Five minutes after I got to my station 2 chikor came sweeping down, and I accounted for both of them. These were shortly after followed by 6 more, out of which I got 2. My position here, however, did not suit me. I moved a few yards farther down, where 5 more chikors' dived down over my head, leaving 2 of their number on the ground. My men then came up and, after gathering my game, we had 2 more beats, in which I bagged 8 chikor, two kalij and 2 cheer pheasants.

The following day I made 2 more beats on the hills and shot 11 chikors, 12 kalij and 2 cheer pheasants.

She.—Well, dear, after that you must acknowledge that you are a fool!

He.—I always knew it, darling; but until I married you I managed to keep it a secret.—Life.



ONE DOLLY VARDEN

Illustrated by the Author

By LOUIS AKIN

No Dolly Varden had ever fallen victim to my alluring manner of presenting the fly.

It was a hot, dry, lazy afternoon, away up in the Cascade mountains near the base of the Three Sisters, and I had nearly reached camp, with perhaps a half dozen goodly rainbow trout in my basket. I was loathe to leave that cool, refreshing breath of rare, sweet air which seemed to have drifted down from the very glaciers, with the swirling surface of the river. I paused in meditation on a massive log that projected well into the deepening current and was nearly submerged by it. A solitary white butterfly, of the countless myriads gently enlivening the air among the tree tops those late summer days, lay dead on the log. When I idly flipped it off with the tip of my rod I wasn't watching it closely enough to see clearly what happened, but the prompt commotion it occasioned was assurance that it was a matter requiring my closest, immediate attention. I didn't have far to go to find another white butterfly; but that time I took the precaution of hooking him on to a sickly looking grey hackle at the end of my leader before flipping him off the log.

The expected happened. I didn't see any trout, but the suction which carried that fly out of the range of human vision was sufficient.

I struck, and struck again. A little line ran out and stopped. I stiffened and awaited developments. Nothing developed. I strained, and nothing gave way. I slackened, and the line curved gracefully to the current. I struck hard, to wake him up, and there came no responsive thrill.

"Stuck, b'gosh!" said I, for I firmly concluded he was a well educated old stager from the big pool in front of camp, just below, and had deliberately hung that fly up on the bottom of the log, where he could get it when he was hungry. I soon began to feel a presentiment that I was about to lose an old friend, tried and true, in that good 6-foot leader, for no maneuvering afforded any relief. Anyway, the reverse side of a 5 foot log, mostly under water, is an extremely ill favored spot from which to rescue a fishhook. I quickly became discouraged and decided on drastic measures. I slacked away, took the line in my hand, and, with a sigh of farewell, mingled with a fervent prayer that if it must break it might break at a hook, I cautiously but firmly applied the power and held my breath. At first the line seemed to stretch a bit, but did not give way; then, with added strength intended to break something and have it over, it gave still more, but strangely drew back, as though a springy branch was holding it. When, in desperation, I yanked for keeps, I received the delayed thrill that burned well into 2 fingers before I could let go and get rod and reel in action.

That fish wasn't inclined to leave his happy home under the big log for anybody. He took 2 whirls out to the end and back, at first; but he mostly stayed right under me, wrapped his tail around a knot, and left it to me to sustain the strenuous end of the excitement. Once in a while he let go, to wet his tail and take a fresh hold. Then I gained a few inches on him, only to give them back when he wanted them. Never a rush or a break; just that stubborn, tireless pull, with an occasional vicious tug or ugly shake of the head such as I had only experienced before in an effort to coerce a balky horse. The bark must have slipped off his knot so that he lost his powerful hold, for finally I began to prove, inches at a time, that I was the bigger and the fitter; and, with never a rush or a break, I slipped the net under him exactly where I had idly flipped a solitary dead butterfly into the swelling flood an hour before. He was my first bull.

THE FOUNDLING.

REV. E. L. TIFFANY.

From the German of Goethe.

I went in the forest so dark and still,
But seeking nothing: that was my will.

In the shade I saw a floweret lone;
How like a star its wee eye shone!

I would have plucked, but it spoke, so shy:
"Must I be broken, to wither and die?"

With its rootlets all from the mold 'twas torn;
To my pretty garden-house 'twas borne;

And planted again in a quiet place,
It branched and blossomed with added grace.

CANOEING ON THE MICHIGAMME.

C. E. BERRY.

A few years ago there was no finer canoeing trip in the country than a run down the Michigamme river, one of the most beautiful streams of the upper peninsula of Michigan. That part of the country was then too remote from civilization to make the Michigamme a profitable stamping ground for the professional hunter, but with the building up of towns on the Menominee iron range the stream became a favorite with that class of men who are without the instincts of true sportsmen, but kill for market. Shortly after the advent of the professional hunters came the hardy lumbermen. The hungry saws at the mouth of the Menominee river had to be fed, and under the telling blows of the lumber-jack's axe acre after acre of the grand old pines that lined both banks was brought to earth to appease their insatiable appetites. The first time I made the run this devastating process had not begun, and the country was as nature had designed it. The Menominee river and its tributary streams were a sportsman's paradise.

Putting our boat in at Republic, we started on a 75-mile run down stream, to where the Michigamme forms a junction with the Menominee, and in a few hours we were beyond all signs of civilization. The water was just deep enough in most places to run our boat over without dragging on the bottom. The current carried us along at the rate of 4 miles an hour, without any assistance on our part other than to keep the canoe clear of sunken deadheads and rocks.

We would pass beautiful grassy slopes that skirted the shores, our boat scarcely moving, so sluggish was the water. Then in a moment we would be caught in the rapids and whirled between high walls of granite that shot up almost perpendicularly 100 feet. These great palisades were richly crowned with mighty pines. Then would be seen places where nature had been twisted out of shape by a hidden volcanic force, which, with a last mighty effort had turned hills on edge, leaving their high, inaccessible, rocky sides as lasting monuments to its awful power. Here and there massive knobs of basaltic rock showed, by a reddish stain, a hidden deposit of iron ore.

Every mile or 2 our boat would go spinning round and round in big eddies. The anchor would be lowered, our fishing lines cast, and such a reward! The fly would scarcely touch the water when there would be a splash, and the reel would begin to click, click, faster than one can think. Then would commence a battle royal; an inch gained, then lost again. The fight would go on until the silk line and the mechanism of the reel would win, and the gamiest of all fresh water fishes, a brook trout, would be floundering in the bottom of the boat. And what trout they were! Some of them weighed not less than 3½ pounds, with flesh as firm as an athlete's muscles.

At every turn in the river we saw deer; some of them gamboling in the water, others feeding leisurely on the tender grass that grew in the bottom of the stream. Sometimes they were in 2's or 4's, and again there were 12 or more in a bunch. They sometimes stood staring at us until the boat almost touched them. Then with a bound or 2 they would gain the edge of the woods and watch us until we were lost to sight around the next bend. In one afternoon's run we counted no less than 52 deer. Had I the wizard pen of a Longfellow I could not find words to do justice to the charming pictures they made.

But how different was the trip I made a few years later. The trout had all but disappeared from the brown waters of the river. The few remaining deer did not stand staring at us with a look of wonder in their great brown eyes, but went bounding out of sight at the first glimpse of our approaching boat. There were plenty of signs that there were still a sufficient number of these beautiful animals to attract the professional hunter, for between the Fence and Deer rivers, a distance of 5 miles, we saw the decaying carcasses of 9 deer, stripped of their pelts, lying on the shores of the Michigamme. Some of them were monster old bucks, others little suckling fawns; but all had been killed by one man, who bartered away his little soul for the pittance of silver he received for the hides of these gentle creatures.

Michigan was tardy in recognizing the fact that the deer in the upper peninsula need protection, but is trying hard to make up for the neglect, and now has good game laws. Despite these, however, and the vigilance of the game wardens, the professional hunter still thrives. 'Tis true with not such great success as in former years, but he is still much in evidence. One of these hunters is reported to have killed no less than 72 deer during the summer of 1898.

But the absence of the game is the least noticeable change in the aspect of that country. The immense forests of pine that once adorned the banks of the river and made such a noble background for the ever-changing panorama, have entirely disappeared. In their place remain their ugly, charred and blackened stumps. It does not seem possible the hand of man could have wrought such a change in so short a time.

Nor have the pines been the only trees that have suffered, for the lumber-jack was closely followed by terrible forest fires that swept everything clean in the old choppings but the pine stumps. What were once beautiful groves of maple, birch and ash are left standing, but their branches do not respond to nature's call at springtide and send forth tender young shoots. They are dead. The sap has been dried up in their veins by the fires. Such a scene is the sublimity of desolation. It is grand but depressing, and makes one feel as though he were walking through a neglected graveyard. Even the birds seem to feel the desolation and do not tarry long in the withered branches of the trees.

The elms, which are by far the handsomest trees in Michigan's forests, and worthy rivals of the pine for the title of king, are still standing, having thus far escaped the onslaught of the axe and withstood the attacks of the flames. But they are doomed. The Indiana hoopmakers have discovered their existence, and are moving their mills to the upper peninsula. In a few years every elm that now stands like a grand old sentinel on the banks of the Michigamme will have gone into hoops to encircle the staves that hold annexation sugar.

Even the hills of rock have not escaped. The miner heard of the dark reddish streaks that stained them and came with pick, shovel and drill. The ugly windlass stands above many a pile of broken rock, and does not improve the scene.

AMATEUR PHOTO BY B. L. NICHOLS.

DASH AT CLOSE QUARTERS.

Winner of 32d Prize in RECREATION'S 6th Annual Photo Competition.

JUNE DAYS ON THE UPPER PECOS.

EDWARD G. TAYLOR.

The Pecos river, in New Mexico, seems to be almost unknown to American anglers. In 1889, Mr. W. W. Strong, of Chicago, invited me to visit that stream, as he owned a large ranch near Glorieta, a small station on the Santa Fe railroad. Mr. Strong is an ardent trout angler, but I thought he was joking when he invited me to New Mexico to fish for brook trout, and with a fly at that. However, as his ranch was only 30 miles from the old town of Santa Fe, which I longed to visit, I accepted the invitation, saw the quaintest town in America, fished the Pecos river, and had such a delightful time that I have returned to that locality every season since.

AMATEUR PHOTO BY H. C. ROBINSON

WAITING FOR THE TRAIN TO GLORIETA.

People who know the lower Pecos—that

WHERE THE BROOK COMES IN.

AMATEUR PHOTO BY J. W. WILLIS.

sluggish, muddy, alkaline stream that loiters through Southeast New Mexico and Western Texas—can scarcely realize the beauty of the upper Pecos.

That river, from the old town of Pecos, 7 miles from Glorieta, to the source of the Mora river, a branch of the Pecos which joins that stream 20 miles above the Valley ranch, is beyond my powers of description. In the Northeast corner of New Mexico, near the Colorado State line, amid shade and solitude, is a rock on whose face I have carved 3 words, "River of Humanity." From beneath this rock emerges a tiny stream of clear, cold water, which winds and turns, finding a tortuous pathway between and around great boulders and roots of mountain pines. Every few rods it is joined by another small stream, from the melted snow on the mountain top, or a spring.

Flowing swiftly down a narrow, deep gulch, it tears and grinds out a wider path, until it becomes a full grown river, able to hew a mighty pathway to the sea. Its waters are the home of millions of beautiful black spotted brook trout, and the green fields and pastures which border its banks for hundreds of miles bear testimony to the great good it is doing for humanity. The fall of the Pecos river is about 65 feet to the mile, and all that one needs to do, to raise a crop, is to build a small dam across the river, above the ranch, dig a narrow ditch, called *saka*, in New Mexico, and turn the water into the fields.

The nearest railroad station is Glorieta, on the Santa Fe, 7 miles from the Pecos river, near the little Mexican town of Pecos, one-half mile from Valley ranch. There is no hotel on the Pecos river, although visitors can find board with Mrs. C. A. Vilas, P. O. Willis, N. M., at $6 a week. Mr. J. W. Harrison keeps a store at Glorieta, and he will accommodate visitors over night and furnish conveyances and drivers to take anglers up the river. A family named Windsor can care for a limited number of tourists. Their place is not far from where the Mora branch joins the Pecos, and the fishing there is excellent.

Anglers wishing to fish the Mora river, above the forks, should provide tents and camping outfits. A number of American families have built handsome cottages along the river, during the past 3 years, which they occupy in summer. This region is in the lower range of the Rockies, elevation 7,500 feet, which gradually increases in ascending the river until it reaches an elevation of 9,000 feet, near the Mora river.

The Pecos is 25 to 60 feet wide, flows at a rate of 6 miles an hour, and has a great variety of what anglers term "fishy" water; that is, a long reach of shallow, riffly water, then a sharp bend terminating in a long, deep pool, the abiding places of

AMATEUR PHOTO BY L. D LINDSLEY.

A CAMP VISITOR.

the large fish. I usually fish these pools from down stream, using only one fly, which I snap sharply down on the surface of the pool many times, after which the fly is allowed to sink beneath the surface of the water and drift with the current. This is the process by which I catch most of my big trout, and even bass, and it is wonderfully effective.

The Mora branch, 2 miles above the forks, is a stream of clear, cold water, rushing swiftly between narrow canyon walls. The water pours over a ledge of rocks, tumbling madly down into a series of pockets, or pools, where it churns into foam, then falls over another ledge into other pools and longer reaches of more quiet water. The trout there are of the black spotted variety, and they run in size from 6 to 12 inches. The pools swarm with them, and if the angler cares to use 3 flies to the leader, he can hook 3 trout at a cast. I used to whip these pools from below, standing on some rock, from where I could see the trout in the pool above. Using one fly, I could usually tease the largest trout in the pool to rise to it. A royal coachman is the best killer, in that river. I have seen a lady stand at the edge of one pool in the Mora river and, using 3 royal coachmen flies as a lure, fill a 12 pound creel in one hour and 20 minutes, with trout varying from 6 to 10 inches in length.

After reaching a point one mile below the forks, on the Pecos river, the pools are longer and deeper, and the fish are correspondingly larger. From that point down to Pecos I alternate between royal coachman, professor, cowdung and gray hackle, tied to a number 6 or 8 hook. In Colorado streams, the coachman is the fly, but a well tied gray hackle is my favorite fly on any New Mexico or Colorado stream. From a point 7 miles above Pecos to Valley ranch is my choice of the Pecos river fishing, and in June, after the snow water

IN CAMP ON THE MORA.

PHOTOGRAPHER UNKNOWN.

TRYING FOR A BIG ONE.

AMATEUR PHOTO BY A. W. FILBY.

has almost ceased discoloring the river, the water becomes very clear, taking on a deep, transparent, greenish shade. Then the large trout will rise to the fly, and an expert can hook plenty of large fish. Every deep pool in the Pecos river, from old Captain Dalton's place down to Valley ranch, contains big trout. I can whip any of these pools, during June and the early part of July, and catch trout running from ½ pound to 3 pounds. I use a 4-ounce split bamboo rod, 8½ feet in length, a light, enameled fly-casting line, a 5-foot single gut leader, very thin, and only one fly.

If there is any more exhilarating or healthful recreation than fly casting, with light tackle, thin rubber hip boots, under a New Mexican sky, and on the Pecos river, it is beyond my ken. The air is mild, yet tingles with ozone. This is truly the land of perpetual sunshine. A broad brim straw hat affords sufficient shade for comfort, and 2 blankets were necessary to keep us warm at night, for the nights are cool in the mountains.

I once spent a night at the house of Jose Gonsaulus, a Mexican. His ranch is 10 miles up the river, from Valley ranch. I had the best room in the place, and they killed and cooked a kid for supper. The next morning my Mexican host drove me back to the Valley ranch in his wagon. As we reached the summit of the rocky road, I looked down into the valley below, and saw the river, with its green fringe of fields and meadows. At one long bend of the river the meadows were fairly alive with wild roses.

It seemed impossible to leave this charming spot, so we lingered far into September. As I sat in the wagon, homeward bound, once again we climbed the mountain roads. Then I saw the Mexican ponies, tied 5 side by side, trotting in a circle, trampling the grain. Women with black shawls over their heads stood in the doorways of the adobe houses, and waved us a parting salutation. The fleecy clouds hung like feathers over the mountains, that reached away, range beyond range, into unseen space. So we left this beautiful Pecos river region, hoping to return to it in 1902.

Papa.—"Tommy, you mustn't behave that way. Everybody will be calling you a little glutton. Do you know what that is?"

Tommy.—"I suppose it's a big glutton's little boy."—Catholic Standard and Times.

THE OL' MILL POND.

GEORGE W. SLAWSON.

On these balmy summer mornin's
  'Fore the sun is in the sky
When the shadders turnin' purple
  Tell that day is drawin' nigh;
With a can of worms a squirmin'
  Jist beside me on the ground;
You are mostly sure to find me
  By the ol' mill pond.

Fer the shadowy reflection
  Of the clouds a-sailin' by,
A-tintin' of the water,
  With the colors of the sky;
An' the cool green grass a-wavin',
  In the medder jist beyond,
Makes it mighty pleasant fishin',
  In the ol' mill pond.

So with the robins chirpin'
  In the harvest apple tree;
An' the orryole recitin',
  Of his sweetest song to me;
With the golden sun a-risin',
  It's jist fun to loaf around,
An' fish for perch an' mullets
  In the ol' mill pond.

Fer the stretch of dewy medders
  Full of misty lines all curves,
Makes a mighty soothin' poultice
  Fer a weary feller's nerves;
An' I 'low if this aint comfort,
  Then it really can't be found,
When you 're anglin' fer mullets
  In the ol' mill pond.

Why! the very frogs a-croakin',
  An' the peepers' pipin' low,
With the mooin' of the cattle
  In the pasture lot below;
An' the rumblin' of the mill stones,
  As the water wheel goes round,
Fill a feller with contentment,
  By the ol' mill pond.

So layin' on the grassy bank
  An' takin' of my ease,
With the sunshine peepin' shyly,
  Thro' the branches of the trees;
A-watchin' of my bobbers,
  As they slowly drift around,
I could jist fish on forever,
  In the ol' mill pond.

AMATEUR PHOTO BY J. R. PETERSON.

I'M BUSY.

Winner of 29th Prize in RECREATION'S 6th Annual Photo Competition.

A TRIP TO THE OLYMPICS.

W. S. JONES.

Toward evening, July 17th, '99, I left my office, in gloomy meditation, and arriving at home, was soon lost in the pages of July RECREATION. I had been ill in early spring, was thin, and getting thinner. I resolved on a trip, and next morning called the ticket agent. Twenty minutes' conversation decided the matter; 5 minutes more and my ticket was made out for a trip to the Olympic mountains.

Next morning, I took the boat, and was soon borne away from hot, dusty, smoking Akron. At Cleveland I boarded the "Northland," of the Northern Steamship Co., and a few hours later we touched at Detroit, a city where cleanliness is held in high consideration. It is a real pleasure to go driving there; Detroit certainly has a broom that sweeps clean. Next came St. Clair flats, just in time for us to witness the finish of a noble fight between a lucky angler and a 5-pound big mouth. The next day we touched at Mackinac. Up the St. Mary's river the scenery is beautiful, and, as the channel is narrow there, the camera clicked every time we rounded a point. At 4 p. m. we found ourselves in the lock at the Soo. As soon as the gates were closed, we made a rapid trip heavenward, being hoisted 17 or 18 feet to a level with the waters of Lake Superior. As the sun went down, we glided gracefuly into those waters. The moon was full, and just enough breeze came over the sparkling waves to make one feel comfortable in a light overcoat. We gathered in knots of 3 or 4 on the deck, delighted with our surroundings, and drinking in the delicious ozone of the Northern woods. If one doubts the healing power of our Northwest, let him sail Superior or Huron for 3 days, and his doubt will vanish forever.

Twenty-four hours after our departure from the Soo, we landed at Duluth, a busy city, some day to be magnificent. The following morning, we boarded the Great Northern Flyer, and were soon spinning along through Minnesota's forests. We made a short pause at Bear lake at noon. Excepting at Blackfeet Reservation, the finest physically developed Indians seen on the trip were at Bear lake. They appear like fighters, and I am sure they are. What a loss it will be to us as a nation if Congress does not set aside this natural woodland park for the preservation of wild animal life. Every sportsman should use all fair means to attain this object.

I went over the Great Northern, and returned by the Northern Pacific. We fairly flew across North Dakota, while rich prairies and vast acreage of wheat passed in review. On through Montana, with her beautiful, rolling prairies, boundless pastures and countless herds. The sloughs were partially filled with water and myriads of wild fowl were seen there. Lazy jack snipe and fat plovers fairly made my trigger finger twitch. Thousands of young ducks were seen here and in North Dakota, some learning to fly and some apparently but a week old. In the distance could be seen a herder on his rocking cayuse, rounding up a bunch of cattle; to the right a slinking coyote, making for a friendly ridge, and away to the left, through the blue haze, a great shapeless mass, our first sight of the Rockies.

To a novice, it is worth the expense and weariness of 3 days' travel to feel the thrill that goes through one's frame at first sight of the Rockies. If one wishes to feel his own insignificance, let him camp in the mountains. Up, up, we went, over the summit just at sunset, and the shadows stole across the valleys, in the gathering twilight as we began the descent. Next morning we arrived in Spokane Falls on schedule time.

A few went North from that point; a few, including me, left that evening by sleeper for Portland, Ore.; but the greater number remained aboard, with Seattle as objective point.

The ride down the Columbia was one never to be forgotten; the scenery was all that could be desired, but, gee whiz! the sand! It required a half hour's shampooing, to get it out of my hair, and I have not so much as some others have.

Portland, with her balmy air, beautiful roses, luscious fruits and kind welcome of friends, should have detained me a month, but I was there to restore my health, so in a week I was *en route* to Seattle. There I secured passage on the "Alice Gertrude" to Port Angeles, for it had long been my desire to wet a line in Lake Crescent.

I was in error, and so warn others. Go to Port Crescent, if you wish to get into the lake by the easiest and quickest route. However, time was no object to me, and I shall always be glad I left the steamer at Port Angeles, for by so doing I met that genial gentleman, Mr. Burt Borrowman. He has a ranch in Eden valley, 9 miles back in the mountains. Nature in all her true nobility is visible every foot of the way. Wild wood, wild berries, wild life; there's nothing tame in the Olympics!

Mr. and Mrs. Borrowman welcomed me kindly, and all the people who dwell in Eden valley I shall remember kindly. The latch string is always out up there, and their hospitality is proverbial.

Burt and I daily took long rambles in the mountains, he with .30-30 strapped to his back, and I with camera and Horton rod, for we were in vicinity of bear and wildcats, and the best of trout streams. Deer abound in the mountains, but none was killed during my sojourn there, as it was before the season opened.

We could shoot grouse, however, and usually killed one a day, that being all the meat we required. They are big fellows, and get up lumberingly, yet get beyond range quickly. We enjoyed all kinds of trout, and the fruit was especially fine, as was also the delicious wild honey. One day Burt and I left the ranch on a fishing excursion to the famous Elwha river. We cut out several miles bv crossing cuts in the mountains by means of fallen trees. When we reached the Elwha, our trouble began. The river was a raging, nearly ice-cold, stream, 200 feet below us, with perpendicular side walls. We managed to get down, by means of logs and clefts, about 100 feet; then climbing into a tree, we began the descent. The base of this tree was on a slippery rock, near a likely looking pool for large trout. When I reached the lowest limb, I found I should need to drop a few feet. Getting around on the side farthest from the river, I let go, and dropped squarely on a wildcat! He was frightened, and with one leap disappeared into a cave, at the mouth of which he was lying.

Dolly Vardens were jumping about, great big ones, but we did not take any of them; they had no relish for our flies. Aggravating? Have you ever been there?

We stretched away for the mouth of the river, 6 miles to the straits of Juan De Fuca. We found the tide out, and as we had our shot guns, we enjoyed an hour's sport with the snipe. We did not score a kill for every shot. I distinctly remember boring some lovely holes in the atmosphere. I do not doubt that a Washington snipe, coming down the wind, covers space faster than shot that is pushed along by nitro. That accounts for some of our misses. "Scaipe! scaipe!" but we pass on, leaving the happy fellows behind us, for we have counted our bag; 6 apiece. It is enough, and anyhow we feel sad over our wantonness. 'Twas the excitement that urged us to slay; next time we will leave our guns at home, and depend on the camera.

Did you ever get truly leg-weary? I did on that occasion, and when the top of the mountain was reached, and a spring discovered, my joy was complete. I would walk 10 miles to-night to taste water from that spring! It was not like the stuff we call water here; it was more like wine.

On the following day we had planned to cross the mountains to Lakes Sutherland and Crescent. Merrily we jogged along through the dense forests. Giant firs and cedars, 7 to 11 feet in diameter at the base, and whose tops seemed to mingle with the clouds, blocked our way. Up we climbed, and our hearts were in tune with our surroundings. As we neared the top, we could almost touch the clouds with our hands, and the air was exhilarating. At the mountain top the sun burst out and millions of raindrops glistened a moment, ere they were absorbed. Burt touched my arm, and turning, I beheld Sutherland at our feet, so peaceful, so far down, that as I bent over the ledge I drew back half dizzy. Lake Sutherland is a beauty spot, and so pleased us we forgot for the time that we had started for Crescent. We fished Sutherland with flies until noon, with indifferent success.

About 2 p. m. I put out a trolling spoon, a common skinner, as an experiment. Soon there came a savage strike, a flash in the sunlight, and then war was on. The battle, however, was short. He was well hooked. I drew him in, killed him in mercy, and we put the spoon away. That was the most beautiful specimen I've ever taken. I thought I had taken a blueback, but have since been informed that they are known only in Crescent, 2 miles farther on. Its dull blue black, soft-tinted salmon-pink sides, and bright silver belly were identical with Crescent's bluebacks. Our admirable hostess, Mrs. Wilson, weighed the trout. Its weight was 5 pounds. She baked it and served it with bread and wild berries, hot biscuits and wild honey. What a repast! We remained at Mrs. Wilson's over night, and next morning went over to famous Lake Crescent. Blue as indigo, nestling among those great red and gray mountains, it has left its impression on my mind so distinctly that I can recall every detail of its beauty and wild surroundings. For years I had longed to behold it, and there I was, bounding over its almost immeasurable depths. All day we passed on the lake, part of the time in an open row boat, part of the day in the little steamer. We landed at last on the shore nearest Lake Sutherland. I backed from the presence of that charming lake as from a throne room.

It was then time for me to return to the coast, and with mingled feelings of gratitude and regret I bade Eden valley and its kind people goodby. I remained a few days at Port Angeles, rowing, fishing and sailing, and met many genial and hospitable town folks, whose kind words and gracious deeds are lovingly cherished.

I was there but a few weeks, yet I returned robust, glowing with health, hard as nails and weighing 168 pounds. I have enjoyed the best of health ever since, though I have learned to take a 3 weeks' trip up the lakes each August to keep myself in good condition.

SPRING VOICES.

A. M'ELRATH.

Winter's frost-bound blast has softened;
  Snow and ice have left the lane;
Brooks are full to overflowing
  With the residue of rain.

Earth is warming in the sunshine,
  Old year's grass is drying out,
Oft is borne on hazy azure
  Brownie mallard's hearty shout.

From the knoll in last year's mowing,
  'Mong the members of his flock,
'Cross the slough and mouldy fallow
  Booms the gallant prairie cock;

And from posts of lofty vantage
  On the fence's topmost rail,
'Cross the field of last year's stubble
  Pipe the meadow lark and quail.

Gentle voices of the springtime,
  You allure me from my work,
Telling of what compensation
  You can give an office clerk.

Then away with trade and barter!
  Worry, take thyself away!
For I love my mother, Nature,
  And I'll visit her to-day.

AMATEUR PHOTO BY DR. SNOW.

DID YOU STEAL MY BREAKFAST?
Made with Premo Camera.

HELD UP BY MOONSHINERS.

J. E. ALLEN.

The events I shall relate happened several years ago, but for reasons which will become apparent, I have heretofore deemed it unwise to give them too much publicity. I flatter myself I am as courageous as the average man, but I am sure discretion is sometimes the better part of valor, and that it is often wise to keep one's word when it is pledged to a desperado.

Five of us, including a negro boy, went on a 2 weeks' camp hunt in the Gulf Hammock. That famous hunting ground is in Western Florida, and extends 100 miles North and South. It is about 20 miles in width, densely wooded, and alive with game of many kinds.

One bright October morning found us in the center of the hammock, our 2 tents pitched about 100 yards from the railroad, guns in order, dogs in good condition and all hands ready and eager for action. The whole morning was consumed in setting up camp. After lunch Donaldson, Dewson and I shouldered our guns and, taking the hounds, struck off into the forest in search of deer.

Our progress was much retarded by the thickness of the undergrowth, but in half an hour we reached a slight elevation, where the ground was dry and comparatively clear. Donaldson, who had hunted there before, pointed to a path which at that point diverged in 3 directions. He stationed Dewson and me under 2 large oaks, in positions commanding the 3 paths. Then, cautioning us to keep quiet and not to get excited, he took the dogs and made a detour to drive the deer toward us. We had not long to wait before the hounds opened, at first indistinctly, then fainter and fainter, until the sounds were lost altogether. After a few minutes, which seemerd hours, we caught the sound again, faintly at first, but growing louder, and we knew the dogs were coming in our direction.

Presently a slight noise caused me to turn, and there, coming up the path was a buck and a doe, side by side. I barely had time to fire before a large tree would have hidden them from me. It was a snap shot, but at the report of my gun the doe leaped into the air and fell dead. The buck sheered off as my companion fired, and went away on 3 legs. With a cry of "I got him!" Dewson ran after the buck, and both were soon lost to view.

Donaldson came up in a few moments with the dogs, and, after viewing my prize and congratulating me, asked where Dewson was. I said he had broken a buck's leg and thought he could run him down. Donaldson blew his horn and Dewson answered far away. Donaldson laughingly said, "He may have caught him; I'll go to see. Stay here until we come back." And calling the dogs away from the dead deer, he started.

The buck seemed badly wounded, as he left a trail of blood that was easy to follow. After I was left alone I could hear Donaldson's horn for a short time, but could not hear Dewson's answer, and finally the forest was as still as death.

I bled the deer and tied the feet together, so I could slip them over my head and carry the carcass easily. Then I sat down to wait for my companions. I waited some time and blew my horn but got no answer. I repeated the blasts at intervals for about an hour, but still no response. As it began to grow dark I shouldered my deer and started, as I supposed, in the direction of our camp. There my troubles began.

As I re-entered the undergrowth I found it difficult to proceed. The ground was soft and wet in places, and my feet often sank into the mud over my ankles. Occasionally a loop of vine caught me or the deer, and once as I stepped into a soft place my gun caught in a vine and I pitched headforemost into a hole, with the deer on my back. I was almost strangled before I could extricate myself; but I got out and struggled on until it became so dark I could no longer see my way. Having gained a comparatively dry spot I sat down to think things over. I supposed I was near camp, and blew my horn, but got no answer, except from the owls, with which the forest seemed to be alive.

Seeing I was in for a night of it, I proceeded to make myself as comfortable as possible. I gathered a lot of wood and made a fire. Though hungry as a bear I did not want to cut my deer, and was forced to content myself with my pipe. As I settled down with my back against a tree to study over the situation I heard the howl of a panther some distance away, probably at the place where I had bled the deer. I did not like that at all. I had a good gun and plenty of ammunition, but could not help feeling lonesome. To add to my discomfort I suddenly saw, directly in front of me, on the other side of the fire, a pair of blazing eyes. I immediately fired at them and they disappeared.

Then to put my deer out of reach of

prowling animals I hoisted it and my gun into a tree by means of my belt and a piece of cord I happened to have in my pocket. After securing the carcass in a crotch, I found another place for myself, and pulling a lot of Spanish moss, I made a cushion, which gave me a comfortble seat. I then went down, rebuilt my fire and made 2 others, so I had fires on 3 sides of the tree. Returning to my perch I entered on my vigils for the night. I fully expected a visit from the panther; and the longest night of my life was spent in that tree. Now and then a pair of shining eyes appeared, at which I promptly fired. Some time after midnight I wounded a skunk by one of these random shots, and the intolerable stench with which he repaid my aggression so nauseated me that I almost fell from the tree. Another of my shots must have hit a large animal of some kind, as I could hear it running away through the bushes. This was probably the panther.

With this diversion and occasional trips to the ground to replenish my fires, I passed the night without a thought of sleep. With the first faint ray of light I lowered my deer and gun, and shouldering both, struck out in search of the camp.

I don't know how much ground I covered that morning, but I was dead tired when I saw, a short distance away, an opening in the forest, which I supposed was the railroad. This encouraged me to renewed efforts. I soon reached the edge of the clearing and was surprised to find, not the railroad, but a rail fence enclosing a 20-acre field of sugar cane. I was about the center of the field. The cane was considerably higher than my head, but I could see over the top of it the roof of a cabin, with smoke curling upward from the chimney. I congratulated myself on my great luck in having at last reached a human habitation, where I could obtain the rest and refreshment of which I was so much in need.

The cane was planted in rows sufficiently wide to admit of my crawling through it, and, with the deer and gun on my back, I made the journey for the most part on hands and knees. It was wearisome work, and I had to stop often to rest. Finally I reached the end of the row, and rising on my knees I parted the leaves of the cane and peered out. Imagine if you can my consternation when I saw a villainous-looking man standing about 20 paces from me, a Winchester rifle at his shoulder, with the barrel leveled straight at my head. He had heard the commotion I made in pushing my way through the cane, and taking me for an animal of some kind, was prepared to give me a warm reception.

"Hold up, partner," I cried; "don't shoot!"

"Drop that gun," was his reply.

I dropped it without ceremony.

"Come out here."

I slipped the feet of the deer over my head and, rising, stepped into the open.

"Hev ver got any more arms about yer?" the man asked.

"No," I replied; "nothing except my hunting knife."

"Wal, jes' drop that, too; pitch it to'rds me."

I did as he ordered and assured him I was not looking for trouble of any kind. He told me to walk in front of him to the cabin. I did so, and was met at the door by another man, who motioned toward a stool, and I sat down.

"Now what are yer doin' here?" said the man with the gun. "Tell it, an' tell it straight, d'ye hear?"

"Certainly," I replied; "I am only too glad of the chance to tell it, but please give me a drink of water and something to eat first. I have been lost in the hammock since yesterday noon, and am so tired, sleepy and hungry I can hardly talk."

"Yer go on an' tell yer story an' ef we find yer all right, yer can have all yer want to eat and drink; but ef yer story aint straight, yer'll git all the sleep yer want an' yer won't need nothin' else. Do yer understand?"

During this conversation I noticed a powerful odor of rum in the room. Casting a rapid glance around, I saw a number of new barrels, such as are used for shipping syrup. Outside was a mill for grinding cane, and, under a nearby shed, a small still or worm for distilling purposes.

Though but a hasty glance, it was sufficient to show me the predicament I was in. I knew I was in the hands of moonshiners; that my safety depended on the simplicity of my story and my being able to verify it. So, bracing up, I told them in as few words as possible how I had come to the hammock with a party to hunt, where our camp was and the names of my companions; how I had been left alone in the forest, had passed the night in a tree, and how in my wanderings I had discovered their cabin and crawled through the cane in the hope of finding the friendly assistance which I felt sure they would extend to me. I finished by saying that my brother was conductor on the train which would pass through the hammock about noon and if they would see him, he could satisfy them that I was all right in every way.

"Wal," said the spokesman, "yer tell a purty straight story an' I reckon yer'e all right. But look here! I'm goin' ter find out, an' ef ye've lied to us yer'll never leave this cane patch. D'ye understand?"

I told him I understood and had no fear

of any investigation he might make. After telling his comrade to take care of me, he went out. My guard took a small dipper from the wall and dipping it half full, from a tub containing several gallons of liquid, handed it to me. It was pure rum, but I drank it down, and nectar of the gods would have tasted no better at that time. I then begged I might have a short nap. The man threw a bed-spread over a lot of cane leaves in the corner of the room, and in a minute I was sound asleep.

When I awoke the sun was well over to the West. Both men were present. They had eaten their dinner and put aside a bountiful supply for me. The food was coarse but wholesome, and I don't know when I ever enjoyed a meal more. I noticed the meat was fresh venison. After finishing my dinner and settling it with a dipper of rum and water, I turned to my captors and asked them what they intended doing with me. The man who had been away answered:

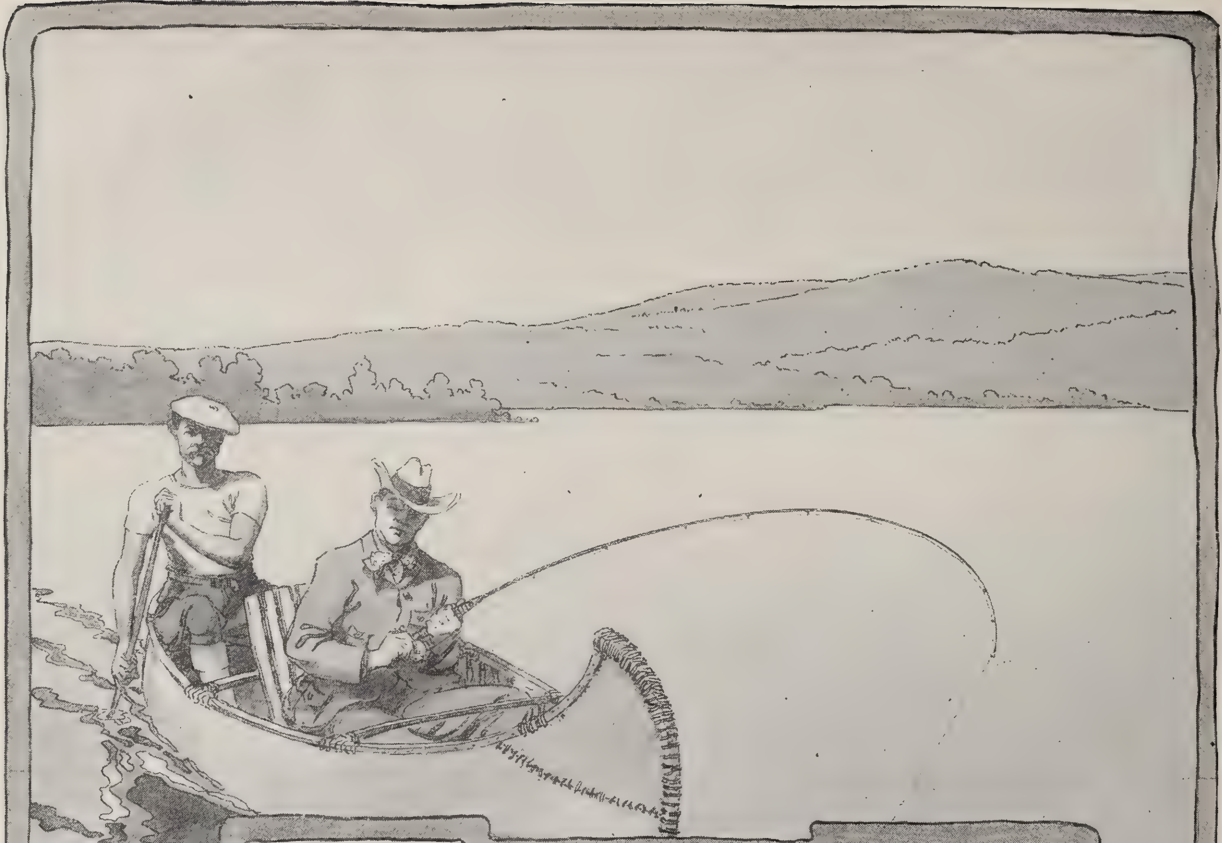
"I have been to Otter creek and seen yer brother and I hev seen yer camp and hev found that yer story is correct. So yer can git in the cart whenever ye'er ready an' I'll take yer to the railroad an' show yer the way ter yer camp. But before yer go, let me tell yer: we are a makin' of rum here and hev ter look out for ourselves. We know yer, know where yer live, and all about yer, an' we've got friends in yer town. Ef yer ever tell anybody ye've been here or ever seen this place, ye're a dead man. D'ye understand?"

I assured him I understood the whole thing and knew how to keep my mouth shut. I did not tell him, however, that in spite of his long hair and bushy whiskers I recognized in him an engineer, who, a year or 2 previous had, while drunk, blown up his engine and lost his job. I announced myself ready to be off and climbed into the cart. He put in my deer, and getting in himself, drew the lines over the little old mule and headed for the forest. He made many turns through the woods, but followed no road and after a while stopped beside the railroad. He had said nothing all the way except to warn me of the certain death that awaited me if I gave him and his partner away, even to the boys in camp. I got out of the cart and he told me to follow the track 500 yards and I would find the camp. Once more shouldering my deer and my gun I bade him good-bye, and in 10 minutes more received a hearty welcome from Sam, who was the only man in camp when I arrived. The rest of the party were out searching for me. A few shots and incessant blowing of a horn by Sam soon brought them in, fagged by their long search, but much relieved at seeing me safe.

I invented a story which satisfied them and made me the hero of the hour, without giving the moonshiners away; but I had the devil's own time convincing the boys that they did not smell rum on my breath.

AMATEUR PHOTO BY F. N. WOOD

TAKING A SUN BATH.
Winner of 26th Prize in RECREATION'S 6th Annual Photo Competition.



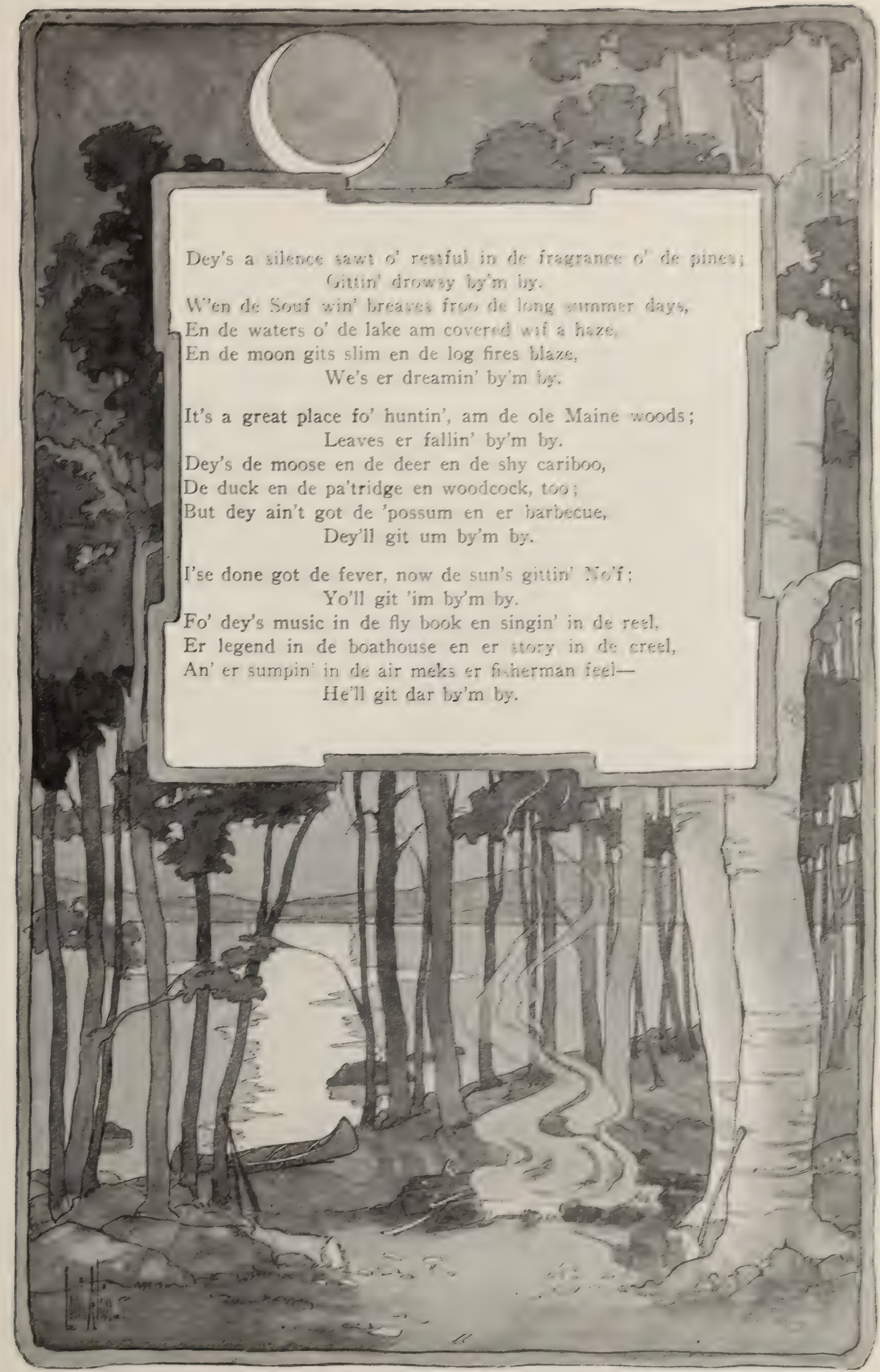
FISHIN' IN DE OLE MAINE WOODS.

EDWARD BOURNE.

Dey's a heap o' fun fishin' in de ole Maine woods;
Gittin' ready by'm by.
If you een't much skeer'd gittin' kotched out late,
En yo's done got plenty o' de right kin' o' bait,
'Case it's mighty ha'd to find, in a Prohibition State,
Yo'll git dar by'm by.

W'at a heap er fun libbin' in de ole log camps;
We'll git dar by'm by.
Dey's de unly kin' er chowder en de big slapjacks,
En pork wif 'lasses twell yo' ole mouf smacks,
Fo' dey ain't a blessed t'ing dat de commissary laicks,
Oh, we'll rise en sing by'm by.

Dey's de bestest kin' o' sport in de streams en lakes;
We'll sing en shout by'm by.
Dey's a ma'ch froo de woods en a buckbo'd ride,
Er heap o' good fishin' en a boat wif er guide,
An' a monst'ous bully lunch w'en de fish am fried,
We'll sho'ly shine by'm by.



Dey's a silence sawt o' restful in de fragrance o' de pines;
Gittin' drowsy by'm by.
W'en de Souf win' breaves froo de long summer days,
En de waters o' de lake am covered wif a haze,
En de moon gits slim en de log fires blaze,
We's er dreamin' by'm by.

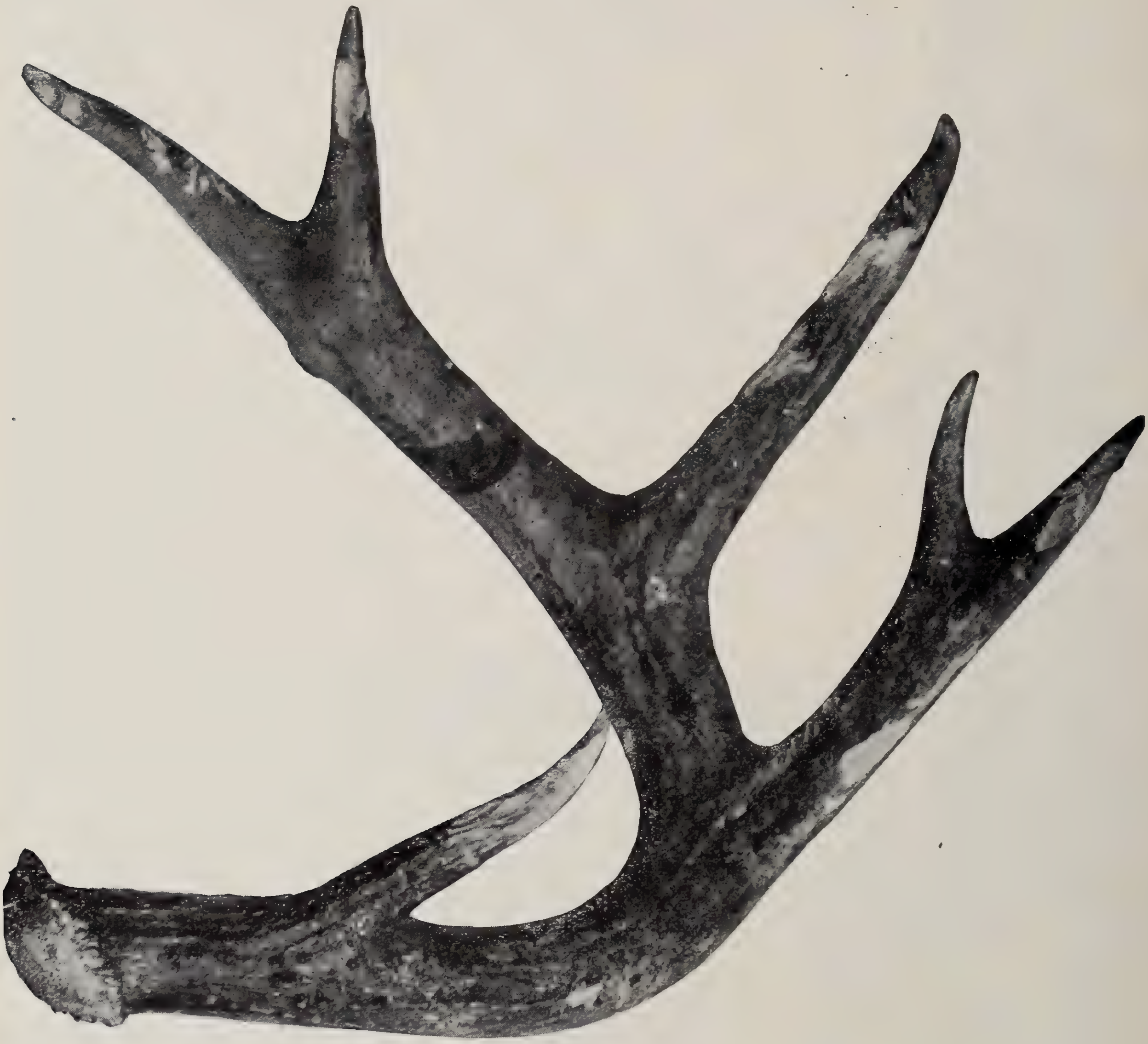
It's a great place fo' huntin', am de ole Maine woods;
Leaves er fallin' by'm by.
Dey's de moose en de deer en de shy cariboo,
De duck en de pa'tridge en woodcock, too;
But dey ain't got de 'possum en er barbecue,
Dey'll git um by'm by.

I'se done got de fever, now de sun's gittin' No'f;
Yo'll git 'im by'm by.
Fo' dey's music in de fly book en singin' in de reel,
Er legend in de boathouse en er story in de creel,
An' er sumpin' in de air meks er fisherman feel—
He'll git dar by'm by.

WHAT BECOMES OF THE HORNS?

M. A. WILCOX.

I have been taking Recreation over 4 years, and have noticed at different times articles on the disappearance of shed deer horns. While grouse shooting near Lake Nippissing, last September, I found 2 shed horns, from different animals. One was found in a clearing and was not touched; but the other, found in dense underbrush, was badly chewed by some animal, the guide said porcupines. I enclose photo for inspection. You may readily see where the rodent got in his fine work on the different prongs. The teeth marks seemed to be fresh, and, no doubt, it would not take long to entirely reduce the horns. I made my negative with a Dallmeyer lens, indoors, 15 seconds, 100 stop, with electric focusing lamp, cross light.

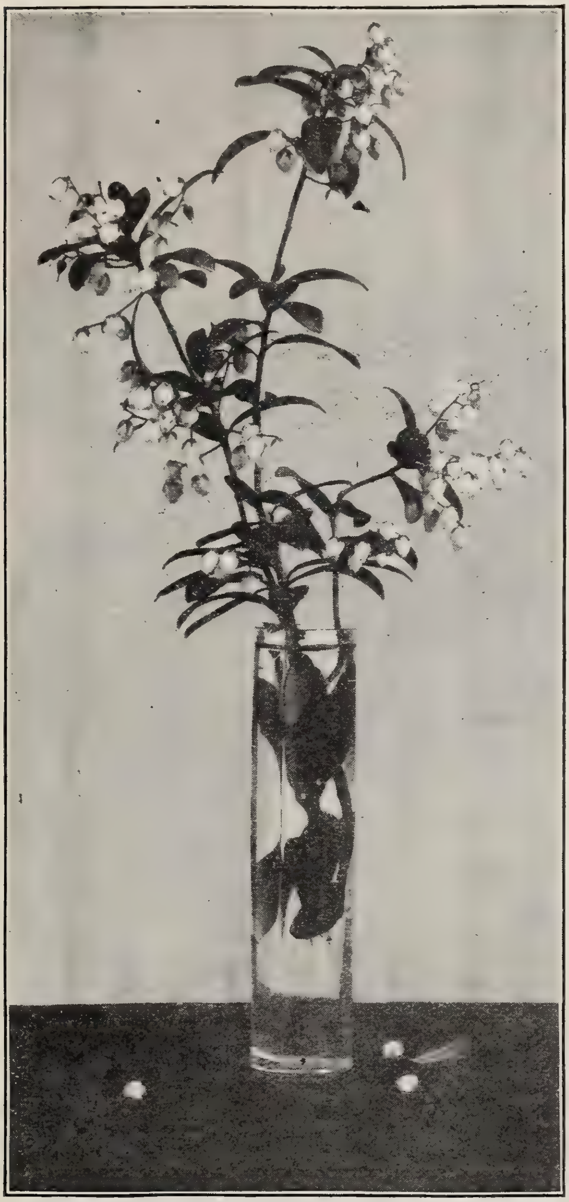


Bell: I saw Tom Green and his wife out wheeling last night.
Nell: Tandem?
"No—baby-carriage."—Exchange.

WINTER BLOOMING HUCKLEBERRY. *ANDROMEDA.*

C. E. PLEAS.

One must see these blooming in their native haunts to appreciate their grace and beauty to the fullest. To do this one usually has to wade into the heart of the cypress swamps, and there, from a few inches above the water to 10 or 20 feet high, he will find them climbing the trunks of the largest trees, creeping in and out of the bark and clinging so closely as to appear as if growing out of the wood. This, too, without roots above ground. How it passes under the tough, close-fitting bark of the cypress is a problem, yet it is difficult to trace the stem, as there are no leaves except on the young wood. The accompanying photo illustrates the glossy, evergreen leaves, with rolled edges, but it can not do justice to the waxy, white blossoms. They are so clear as to readily show the stamens through the sides. In appearance they are the most delicate flowers imaginable, but in reality, they are exceedingly firm and retain their form and beauty for days after cutting, without water. The blooming period lasts 2 months or more, January to April, and when a flower is done, it falls with as much noise as a big drop of water. There is no edible fruit, but instead there are dry seed pods. When a tree bearing one of these plants is cut down the plant takes possession of the decaying stump, rooting in the inner bark and sending up numerous stems, a foot or so high, laden with the tiny white bells. The photo is reduced about one-half.



A NATIVE OF FLORIDA.

WHEN THE PERCH BEGIN T' BITE.

W. M. SCHULTZ.

There's a sort of dreamy feeling
  Comes a-creeping over me,
And I'd like t' be a boy again,
  Just as I used t' be.
Get up early every day,
  Just as she's getting light;
Sneak out my pole and sail for th' creek
  When th' perch begin t' bite.

Seems as though I can smell th' wind
  That's blowing from the wood,
Full with the cedar's pungent breath,
  My lord! but it does smell good.
And I'd like to be,
Just once again,
  When the days are warm and bright,
By the deep still hole
Just below the dam,
  When the perch begin t' bite.

Let's see. Train leaves at 7,
  That would put me there at 9;
Go down first thing in the morning,
  By George! That would be fine.
I wonder where my reel is?
  And which boy's got my rod?
Guess I could get a can of worms
  By pullin' up some sod.
Here, Jim, go up and get my grip;
  Step lively now and light!
Your dad's going back on his native heath,
  I'll bet them perch 'll bite!

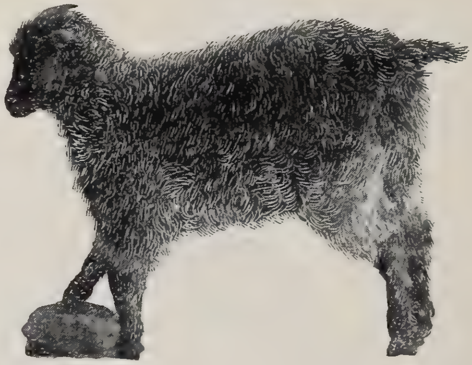
SHEEP OR GOAT?

FRANK MELVIN.

One day in November, 1901, George Reed and E. H. Underhill were hunting bear in the Sangre de Cristos, a spur of the Rocky mountains, which forms the Eastern boundary of the San Luis valley in Southern Colorado. When near the timber line they separated. Mr. Reed continued toward the top of the range and soon left the timber far behind. When he reached an altitude of about 12,000 feet, the ground became much broken and rocky, which necessitated slow and careful traveling. While making his way cautiously over this broken country, Mr. Reed espied what he took to be a cinnamon bear cub, about 200 yards distant. The opportunity for a shot being favorable, he immediately fired and the animal fell. At the sound of the rifle shot, 5 strange animals, resembling sheep or goats, sprang from among the rocks and started off up hill. Mr. Reed is an old-timer in that country, having hunted in the Rocky mountains 20 years; and after that long an experience, to have a new animal sprung on him, right in the heart of his favorite hunting grounds, was almost too much. He simply stood and watched them make their escape, without firing another shot.

After his surprise had passed, with the fleeing animals, he advanced to the one he had shot and found that he had indeed killed a strange animal, that resembled both the domestic sheep and goat. He at once went in search of Mr. Underhill, who helped him take the animal home. Mr. Underhill being a taxidermist, mounted the animal life size and has it now in his possession, but still without a name.

The animal killed resembles a domestic sheep, in being low and blocky-built, with short legs. It is a female, about a year and a half old, stands 25 inches high at the shoulders, its body being 30 inches in length from the point of the shoulder to the after part of the ham. The neck is short and extends straight out from the shoulders, there being no curve from the top of the head to the top of the hips. Its ears are about 3 inches long, are thin, and hang down close to the sides of the head. It has horns about 3 inches long, which extend upward and backward from the top of the head. It has a heavy coat of fine wool, almost fur, slightly curled, 8 to 12 inches in length, extending down to the knees and hocks. In color it is light buff on the breast, seal brown on the shoulders, coal black around the central portion of the body, then seal brown merging into buff on the hind quarters. From the knees and hocks down, the hair is short and black, as, in fact, all the points are black; nose, tail and tips of the ears. While in general make-up it resembles a domestic sheep, its tail, which is short, its ears and its horns resemble those of certain families of the domestic goat.



Mr. Reed claims that 2 of the 5 that escaped, were almost white, while the others were colored like the one secured.

ANSWER.

This is an exceedingly interesting find. The animal shown in the picture is a goat, not a sheep. It is apparently one of a flock that has resulted from a pair of domestic animals, previously kept in confinement, but now run wild. Your careful and conscientious observations, and the thorough and painstaking manner in which you have followed up the discovery are most creditable to you.—EDITOR.

"What prompted you to rob this man's till?" asked the judge of the prisoner.

"My family physician," was the reply. "He told me it was absolutely necessary that I have a little change."—Opportunity.

A PROMINENT GAME PROTECTIONIST.

Washington, D. C.

Editor RECREATION:

I am a member of the House Committee on Territories to which was referred the bill of Congressman Lacey which aims to provide a game law for Alaska. As I am deeply interested in the cause of game protection the Committee selected me to write the report on the bill, which with the bill has been presented to the House for consideration.

HON. FRANCIS W. CUSHMAN, M.C.

I enclose you herewith a copy of the Alaska game bill with the amendments proposed by the Committee, and no doubt some of the matter contained in the report or the bill may interest your readers. We hope to pass this bill before Congress adjourns.

With my best wishes for the great success of your splendid magazine, of which I am a regular reader and an enthusiastic admirer, I remain,

Francis W. Cushman.

Mr. Cushman is one of the youngest members of Congress, and a prominent member of the L. A. S. He lives at Tacoma, Washington, and is therefore thoroughly conversant with the needs of Alaska in the way of a game law. Mr. Cushman is fond of hunting and fishing, and had many interesting experiences before reaching a position in the American Congress. The following appears in the Congressional Directory:

> Born at Binghamton, Iowa, May 8, 1867; educated at the high school and Pleasant Plain Academy, he assisted himself in securing an education by working as a water-boy on the railroad in summer, attending school in winter. After the completion of his school course he worked for a time as a section hand on the railroad. At the age of 16 he moved to Wyoming, where he remained 5 years working as a cowboy on a ranch, in a lumber camp, teaching school and studying law. He then moved to Nebraska and practiced law, afterward going to Tacoma, Washington. He was elected a Member of Congress from that State in November, 1898.

THE FIERY GROTTO.

DR. L. E. HOLMES.

Near Bridgton pond, where strangers stray
From city cares the summer's day,
A grotto lies secreted good,
Around, above, with leafy wood.
No passer-by along that way,
Or poet musing on his lay,
Or peddler with his ware's display,
But halting there entranced he stood
Near Bridgton pond.

Within all o'er the fiery spray
Of sumach glows—a furnace play.
I passed thro' as Elijah would,
Unscorched, except in burning mood
To paint that fiery grotto gay
Near Bridgton pond.

A FUTURE GREAT.

The 3-year old sportsman who poses in the accompanying photo, does not claim to have bagged the duck, nor does he expect your readers to think so. When he becomes skilful enough to hit a greenhead on the wing with a .22 caliber rifle, he will want to have his picture taken in a boat, with a stretch of open water, button willows and rushes for a background. The truth is he cares little for either duck or gun, and is willing to pose in the back yard, togged in overalls, the reward being a stick of candy immediately forthcoming. He is known by his little friends as Frank.

AMATEUR PHOTO BY W. B. WEIR.

FRANK.

W. B. Wier, Fort Smith, Ark.

AMATEUR PHOTO BY OLIVER LIPPINCOTT.

BRIDAL VEIL FALLS.
Made with Bausch & Lomb Plastigmat Lens.

BUTCHERY IN OREGON.

Following are letters I received reporting the work of some game butchers in Portland :

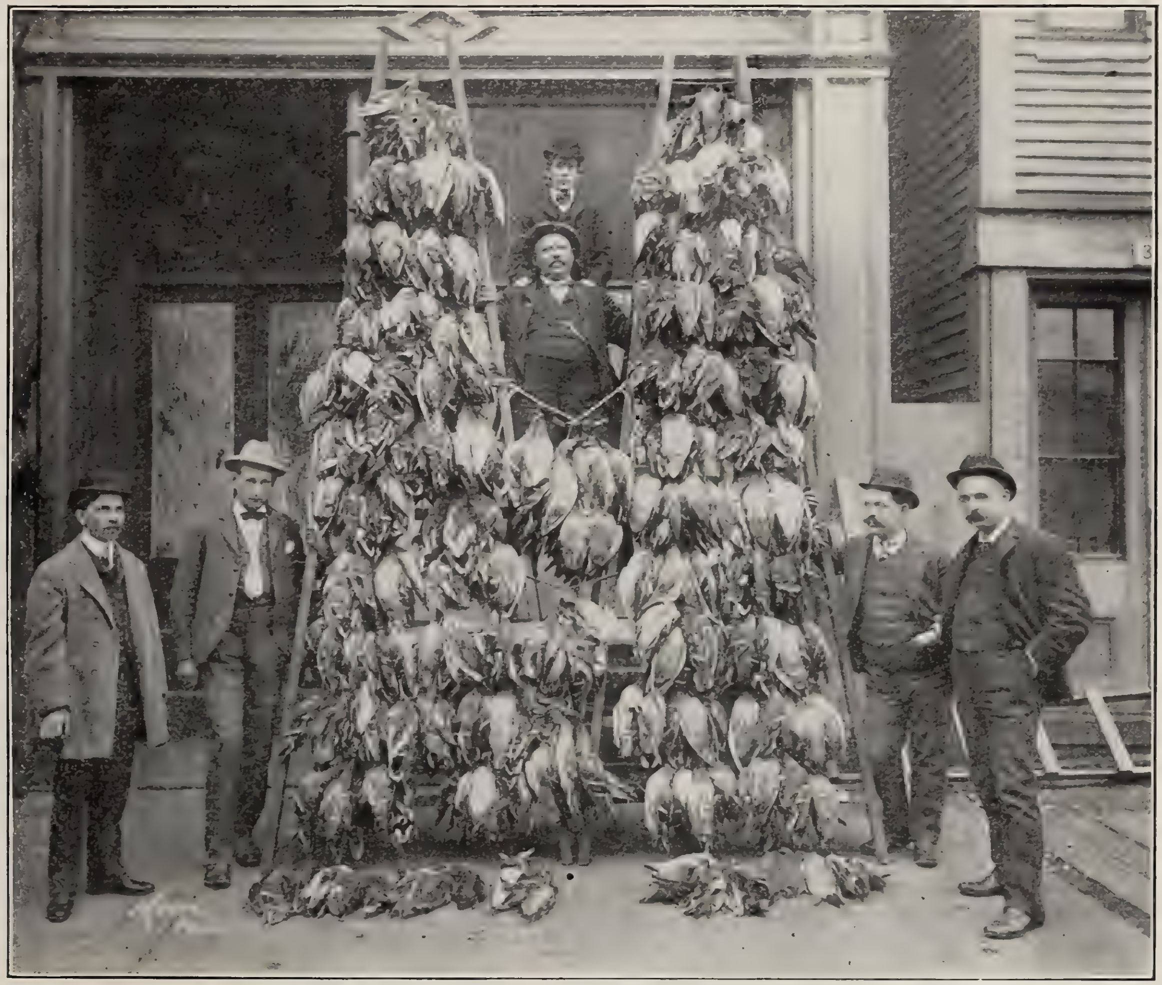
Enclosed find clipping from the Oregonian of November 14th. These are some of our "sportsmen" in Portland. Mind, not market hunters. This has been going on for years, and there are plenty more of the same calibre. These people will sneak in the back door of the market, sell ducks, and then howl about market hunters. I have seen passenger pigeons in countless thousands. Where are they now? Also have I seen the buffalo disappear from the face of the earth; the antelope nearly following suit; and if these people are not restricted, where will our ducks be in a few years? I gave up hunting 20 years ago because I have not the heart to kill things that enjoy life as well as you and I do. I have never meddled with anybody's affairs, but when it comes to such wanton slaughter, I feel it my duty to call your attention to it. I do not believe in killing just for the sake of killing.

Olnas, Portland, Oregon.

The clipping to which Olnas refers is as follows :

The Deer Island Sporting Club has, at Deer Island, 36 miles below Portland, on the Columbia river, a game preserve comprising 3,500 acres. The greater portion is covered by lakes, ponds and sloughs, the favorite resort of water fowl of all kinds.

The club shoots every Sunday. At their last shoot they bagged 395 ducks, mostly mallards, but including specimens of every species of duck which visits this region, from a teal to a canvasback.



Under separate cover I mail you copy of photograph of some bristlebacks. These swine are business men and clerks occupying good positions, but they can not afford to hunt ducks on a preserve without killing the limit and selling them on the market to pay the expense of their destructive work.

Each year that the State Legislature meets brings better laws and more RECRE-

ATION readers. Scarcity of game sets the sportsmen thinking, and in RECREATION they find a remedy.

C. N., Portland, Oregon.

On receipt of these reports I wrote the men mentioned, asking for confirmation. One of them replied as follows:

We did make quite a killing the day you refer to, but not to the extent stated. Nine of us killed 289 ducks. We sent 180 ducks to the Children's Home, Good Samaritan Hospital and St. Vincent Hospital, of this city.

C. N., Portland, Oregon.

ANSWER.

The fact that you gave a lot of the ducks to certain hospitals does not mitigate your sin in the least. This is an old excuse, and has been put up by hundreds and perhaps thousands of men before you. It is simply stretching the cloak of charity to cover sins that have been going on since the beginning of the world. It is a wonder the ancient garment was not torn to pieces hundreds of years ago. Children do not appreciate game birds. Those children would have been just as well pleased if you had sent them a few carcasses of veal or mutton or a few quarters of beef. So would the doctors and nurses connected with that institution; and those animals can be reproduced by the farmers and ranchmen in your State every year. The ducks you killed do not belong to your club simply because they stop there in their Northern and Southern flights to feed and rest; nor because you bait them there with grain and shoot them when they go to get their breakfast. These birds belong to the sportsmen in general, and this great army of good men will scarcely concede the right of a few members of your club to slaughter 289 of these birds in a single morning under the flimsy pretext that they are to be given to some charitable institution.

However, the killing was not so disgraceful as the display you made of your vanity and your swinishness by stringing up these birds and standing yourselves up about them to be photographed. That was a most disreputable piece of work and I am glad to have a chance to show the world how infamous a lot of men can look when they show up in their real characters.

EDITOR.

AMATEUR PHOTO BY J. BAUER.

HEN HAWK.

Winner of 21st Prize in RECREATION'S 6th Annual Photo Competition.

THE TREE THAT INFLUENCED ME MOST.

Let others sing in praise of men,
  Of art and books galore;
My song shall be of impress deep
  Wrought by the woodland's store.

Of aspirations that the oak
  Taught from her acorn small;
Of perseverance that my soul
  Learned from the chestnut tall.

The maple fair, the stately pine,
  Each willow by the brook
Guided my childhood's careless thought
  In upward ways to look.

But yet 'tis true beyond dispute,
  As memory's leaves I search,
The tree that influenced me most
  Was mother's little birch.

SARAH A. FAUNCE, in Life.

Lobsters usually don't agree with us. Indeed, about the first mark of a lobster is his not agreeing with us.—Puck.

FROM THE GAME FIELDS.

The man who quits when he gets enough, with plenty of game still in sight, is a real sportsman.

WHEREIN BLOOD WAS WRONG.

Unionville, Ohio.

Editor RECREATION:

I notice in February, 1902, RECREATION the letter received by Mr. Pratt, chief warden of the Michigan Division of the L. A. S., from a Mr. Blood, of Conneaut, Ohio. This letter is unique and interesting. I also read with interest your editorial on the letter, and I take the liberty of writing you in regard to your roast, especially as I am much interested in your publication, not having missed a copy since 1896. I am unacquainted with Mr. Blood, but I know a number of such old gentlemen, who are illiterate and uneducated, for the reason that at the time they should have been obtaining an education they were helping to make a garden of this wilderness; and it is due, in a large part, to these same backwoodsmen that we have such a country as the famed Western Reserve, which is noted for the wealth and refinement of its rural and city population. I know that these old sportsmen love to hunt as long as life lasts, for it was born in them, and I also think that as law-abiding sportsmen there can be no fault found with them. It makes no difference what vintage his bed quilts were grown in, or how many patches he uses on his bullets. He is usually a man who can not spend his hundreds or thousands of dollars each season on his hunting trips, and does not feel like paying a guide to do something that he can do better himself; but he does love to hunt. Mr. Blood, wishing to abide by the game laws of Michigan, writes a gentlemanly, if an illiterate, letter to a man who is in all probability paid a salary to furnish to the public just such information as he asked for. It is, in my opinion, not only unbusinesslike, but ungentlemanly in Mr. Pratt to send you the letter for publication. You know it is not the man who uses a muzzle loading gun who kills the game. It is the man who goes into a blind with 2 or 3 modern guns and a man to load and clean them for him, who kills his 75 to 100 ducks in a few hours' shooting; or the man who hires one or 2 guides to show him a deer, and "who would not know a red squirrel from a rabbit unless told the difference by a guide." I am in favor of strict game laws, and do not stand up for the violation of the game laws of any State, no matter if unjust. When the editor of RECREATION roasts a man because he wishes to obtain information in regard to the game laws, even if he is illiterate, is from the country, does not use the latest Abercrombie sleeping bag, or the most modern small bore rifle, the editor is in rather poor business. I, therefore, take the liberty of expressing to you, and I hope to all RECREATION readers, my displeasure at the appearance of so unjust an article in the official organ of the L. A. S.

Jay C. Goddard.

ANSWER.

I did not criticise Mr. Blood because he asked for information about the game laws, but because he complained that the laws of Michigan did not allow him to sell game. He said he had previously sold all the game he killed, except one ham which he tried to bring home each year, and which was, very properly, seized and confiscated by the game warden. Mr. Blood says, in effect, that he must kill the 3 deer allowed him by the law, if he goes to Michigan, and inasmuch as he is not allowed to sell it or bring it out, must leave it on the ground to rot. It is this inordinate thirst for blood which I, in common with thousands of decent men, object to. I am trying to convince all sportsmen that true sport is not regulated by the size of the bag; that a man may have fun in the woods in other ways than in killing to the full limit of the law or even beyond it.

You are in error in assuming that Mr. Pratt is paid a salary for furnishing information to the public. On the contrary, he works for nothing, boards himself and pays his own expenses. He is the Chief Warden of the Michigan Division of the League of American Sportsmen, and, like thousands of other members of it, is spending his time gratuitously and investing his money in the work of protecting the game and educating the public to higher lines of sportsmanship. He answered Mr. Blood's letter promptly and fully, then sent it to me, because he thought it might prove interesting to the thousands of readers of RECREATION; and so it has.—EDITOR.

CONNECTICUT GAME LAWS.

Norwich, Conn.

Editor RECREATION:

Our last Legislature made a bad mess of the game laws, in that the opening and closing days of the season were not well defined. It repealed an old law, overlooked another and substituted still another, so it is impossible to determine which is effective. I talked with several lawyers on the subject and their opinions differed widely. Some said the season was October 15 to December 15; others, October 1 to December 1; and some said to January 1. In fact, the above 5 dates were arranged in every possible combination and the same insisted on as being the final solution of the problem. The learned men who framed the law undoubtedly intended to make the open season October 1 to December 1, and so it was at last interpreted. The bag of ruffed grouse was limited to 5 a day for one man, 36 in the season; an excellent provision.

There is practically no shooting before October 20th, on account of the leaves still hanging on the trees. I know of no one who killed more than 3 grouse in one day before that date, and it was not because the birds were not plentiful. The first day I went out I raised no less than 50 grouse, more than I had ever seen here before. I only got 5 shots, however, killing 2 birds, and I had as careful a dog to aid me as I have ever owned. The birds were wild and no dog or man could get within range of them. So practically the open season is but little more than a month. When the law allowed shooting in December more birds were killed then than in October and November combined. The cold would drive them into the swamps, and they would lie until almost trodden on. This year they stayed in open woods. They got the best of the market hunter even, and with more birds than ever to start with there ought to be a great increase next spring.

Bob Whites were plentiful in the spring, but not during the fall. I am at a loss to account for their disappearance. Woodcock were plentiful. I shot 11 one day during the flight, and 10 another, and stopped both times before I had hunted half the ground I started out to work. They were small and poor in spite of their abundance.

The Legislature should leave the law as it is, and devote its energy to enforcing what is already good enough. What is most needed is a real, live, wide awake warden or 2. Of course if the sale of game could be stopped altogether that would be perfection, but I despair of that at present. Thorough enforcement of the present laws would be a great step. Game is sold in large quantities in this city now, even though the law prohibits the possession of it. Thousands of birds are shipped to New York during the season from this county. One man boasted that he shipped more than 1,000 grouse and quail last year. Agents representing New York dealers go all over the country offering large prices for game. I would be willing to wager that I destroyed 50 snares while out hunting the first of the season. A good warden would get on to these things, wouldn't he? In a nearby town a deputy was appointed the other day, and he immediately went to work for all there was in it. He snared a few birds himself for a starter, and then went around sticking them in some other fellow's snares. Then he would arrest his victim, prosecute him, and pocket half the fine. He is making a good living out of it, I do not doubt. Lorenzo Blackstone.

A GROUND SHOT; WITH REASONS.

Lubec, Me.

Editor Recreation:

On the evening of October 30 I happened to drop into the hardware store and found Jacko, as the boys call him, just bristling for a hunt. He proposed that we start at 3 a. m., in order to be in the woods around Porcupine hill when the grouse began to feed. We arranged to have the night watchman call us at 2.30 the following morning.

At the agreed hour we struck off across the fields in the moonlight, and both enjoyed the 2-mile walk to Porcupine. Jacko chose the North and I the South side of the hill, and we entered the woods. I skirted the edge a short distance and then followed an old wood road that carried me back 2 or possibly 3 miles. Going in I put up a few birds, but it was not yet light enough to shoot.

On the way back I saw, and shot on the ground, a splendid bird, as plump as he could be. I presume some Recreation readers will be horrified at my shooting a bird on the ground; but opinions differ as to what is really sportsmanlike. As yet I fail to see that the wing shooters are any better than I am when they employ a dog to find and flush the birds. Almost anyone can shoot the limit if he has a good dog. When a man finds his own game, the bird stands a far greater chance to get away. In thick cover a good shot does well to bag one out of 10 birds flushed, doing his own hunting. With a dog a poor shot ought to get half the birds. When a ruffed grouse goes up from under a man's feet without warning it takes a mighty cool hand to stop it. If I can still-hunt a good shot I take it, whether sitting or flying, and shall do so as long as other men use bird dogs. I do not class such men with ferret hunters, but the difference really is one of degree, not kind.

Continuing my hunt, I came out at nearly the same place where I went in. Seeing nothing of Jacko, I struck across a clearing for a spot that I thought might hide a bird or 2. On the way I saw a porcupine taking his breakfast, and going along as quietly as possible I came right up to him. The look of surprise he gave me caused me to laugh outright. He was an enormous old fellow, and I think would weigh 50 or 60 pounds. He did not appear afraid of me, and I got down on my knees and stroked him with a small stick. The boys told me after I got back that I should have shot him, but I do not kill everything I see in the woods. I am glad I let him go; I may want to play with him some other morning, for we had a good time, and he seemed to enjoy it as much as I.

Not being able to find Jacko, I started for home, with one bird out of 4 flushed, and was in the office at 8 a. m. doing business. W. G. Fanning, D. D. S.

A TURKEY HUNT AT RUM POINT.

Bunk's branch and Josh's branch meet at Rum Point and empty into the St. John's river through a thick swamp of cabbage palmetto and cypress trees. It is just the place for an old gobbler to show you what he knows.

Dan, Tanner and I left home on horseback about 9 a. m., and arrived at the hunting ground by noon. After we had selected a place for camp we started out in different directions. Dan went West; Tanner, East; and I went down by Bunk's branch. I found plenty of fresh signs and sat down to try my skill at calling. If you think sucking on a pipe stem or turkey bone in any key you may happen to strike is all that is required you will find yourself mistaken when you come to try it on a 2 or 3-year-old gobbler. At every false note you make you will see his neck stretched, and saying "tuck, tuck," he will take a few steps in the other direction.

While I was seated on a log, waiting and watching, I heard the report of a gun just above me, and, thinking it might drive something my way, I remained quiet. Then I heard a second, third and fourth report. Wondering what it could mean, and knowing this was Dan's first turkey hunt, I started for the place where the last report sounded. Reaching there I found Dan greatly excited.

"Where was I?" he shouted. "Where was I sitting?" Just then a hen flew from a tree she had pitched in during the bombardment, and bang! went Dan's gun into the ground.

"There goes another!" he cried. "Take me to the place where I was sitting. There were 5 or 6 walked right up to me."

All the damage he had done by his fusillade was to cut off a branch of palmetto 3 inches in diameter. Tanner came to camp at sundown with 2 gobblers. My only shot was at a bird at long range that Dan had scared half to death.

Next morning we started at daybreak to catch the birds on the roost. As before, we went in different directions. I managed to get a hen within gunshot and killed her, and Tanner shot another. But Dan looked blue. He said;

"I was lying flat on my stomach with my gun standing against a tree about 6 feet away, when 4 turkeys, with their heads together, looked over the blind at me, not 10 feet away. And I lay there afraid to breathe and watched them walk off."

I asked him why he did not jump up quickly and fire before they could get out of range.

"Thunder!" said he, "I never thought of that!" H. B. Beidler, Chuluota, Fla.

STATUS OF THE ALLARD HERD OF BUFFALO.

Missoula, Mont.

Editor Recreation:

I have had a long talk with one of the Allards, relative to the buffalo herd.

Charles Allard, Sr., died some years ago, and his estate was in court for settlement, a decision having been rendered about a year and a half ago. The family consisted of a widow, 2 sons, now both of age, and a daughter who is yet a minor. The widow has since married again. The buffalo herd was owned conjointly by Allard, Sr., and Michael Pablo. Shortly after the decision of the court, making division of the property, Joseph Allard sold to C. E. Conrad, of Kalispell, 38 head of buffalo, which have been placed on Conrad's ranch. Last week Joseph Allard delivered 5 cows and 3 bulls to parties in Iowa He told me he had 9 more sold, and, I believe, not yet delivered. New York parties have taken 2. This makes a total of 57 I know of sold by Joe. The share of Charles, has, I am told, been sold to the Northwestern Live Stock Association, and, I understand, will remain on the reservation, except as taken out for exhibition purposes. The daughter's share is not yet sold.

Deducting all the animals sold, there will yet remain in the herd 220 full-blooded animals and 65 head of graded stock. The larger portion of these belong to Michael Pablo, who had a half interest with Allard. Pablo holds a high valuation on his animals; perhaps high enough to permit heavy sales. Last year there were 65 calves. About half the cows have calves each year. The fertility of the herd does not seem to be on the decrease, and the proportion of calves is as great as in past years, as nearly as I can find out. Mortality among calves is about the same as for domestic animals. The cows that are halfbreeds are fertile with either buffalo or domestic bulls, but I am unable to find that the same is true with graded bulls with buffalo or domestic cows.

While the herd is being broken into badly, it would appear that many years must elapse before it is entirely dispersed. Fifty or more may be sold annually with no decrease in the numbers of the herd. It is well cared for and looked after. The animals are made to know man. Yesterday, at Plains, 2 buffaloes were killed for Rowley, of New York, and Allard himself killed one. It seemed a pity to see them shot down in a corrall, surrounded by a gaping crowd of curiosity seekers.

M. J. Elrod.

AT OCOSTA BY THE SEA

For a long time I had been promising myself a trip to Ocosta, by the sea, and a duck hunt on South bay, an inlet of Gray's harbor. So with black Bruce, Sam and I boarded the train at Elma, full of hope and sure of a good time. Arrived at our destination, as far as railway communication was concerned, we found a hotel, partook heartily of supper, persuaded the cook to feed the dog, and went out to talk hunt and engage a guide and a boat.

We were out betimes in the morning and started for South bay on a full tide. At the duck grounds our guide discharged himself and we set out to shoot ducks. Of all that we that day encountered, mud came first, water second, grass third, and ducks fourth; but the sun shone and the ducks flew high. We waded mud, pulled the boat, hid in the grass and shot ducks until 6.30 p. m. At that hour we collected our kill and turned the prow of our boat homeward. It was a grand experience, that pull of 4 miles under a cloudless sky with a big moon and the great double beacon of the Westport lighthouse winking its eyes at us alternately all the way back to Ocosta. Great swells coming in from afar tossed our frail boat as if it had been a feather. So rough it was that when we had made fast to the dock we could scarce keep our feet. The only way to reach the top of the dock was by a perpendicular ladder some 20 feet long. Up that I climbed with both guns and the ammunition, while Sam made one end of a rope fast to the dog's collar. He then tossed up the loose end of the rope to me and I hauled Bruce up in a jiffy. Then Sam, though I ought not to tell, said he was seasick, and I had to go down, scratch around in the boat and get up the ducks. That done we hied us to the hotel and ate supper.

We were up early next morning and walked far out on the long wharf to take a final look at the breakers rolling in from the mighty Pacific before we took the 8.30 train for home. What about the ducks? Well of that I am loth to speak. Truth to tell, Sam has the better gun and is a better shot than I, and so killed more ducks. But bear in mind we are not game hogs.

T. A., Elma, Wash.

BOYS AGAINST SPARROWS.

Naturally a good many "don'ts" creep into Recreation besides its standing admonition, "Don't be a razorback"; and sometimes I notice an equally meritorious "do." One example I wish particularly to applaud. It is the story in February issue of the little boy who loaded his shells with mustard and ground-raked English sparrows, an act as commendable as it was unsportsmanlike. Please, Mr. Editor, give us more stories of that sort and print them in capitals. Every small boy reader of Recreation is its sworn disciple, and I hope you will continue to turn their willing minds toward the undoing of the sparrow.

I live in a large old fashioned house, the windows of which are ornamented with the deep mouldings and arched caps once so popular. In mouldings and arches the sparrows built nests year after year, despite all manner of neck-endangering exploits to dislodge them. Our verandas and blinds were calcimined with filth, our garden was stripped of peas and corn, and our poultry was robbed of food by swarms of feathered pests. In vain I tried to poison them; they soon learned what to avoid and did it religiously.

It was then that I found an efficient ally in the son and heir of the house. He was pompously proud of his first air gun, and to him I preached a crusade against the sparrows, cheerfully furnishing all the shot he could use. It took some time to perceptibly diminish the number of our enemies, but he kept at it. I could not tell now how many he has killed, but he thought it an off day when he could not get 10 or 12. He has become the owner of a double barreled shot gun and a rifle, but as he can not use these within the city limits, he still picks off the sparrows with a first class air gun.

He has, virtually, cleaned the place. The sparrows all know that gun. Seldom more than one or 2 are seen in the yard, and no man ever got out of the way of a grizzly more willingly than those sparrows vanish when the boy appears in the yard with a gun. Boys may never be able to kill all the English sparrows, but they can make a beginning.

Maude Meredith, Dubuque, Ia.

CLOSED MARKET EFFECTIVE.

We may yet live to see the market for game a thing of the past. The thing which has been, is, and always will be the keystone to not only this arch, but all others in this world is the desire of all to get money. If it can be got by killing the last deer, antelope, or elk for the market, or the last bird for the millinery store, somebody is going to find a way to supply that market. As long as a market for game exists so long will there be an incentive for the pursuit of game, and some way will be found to smuggle a large proportion of it to those who will pay the price. All the protective associations and game wardens in the world can not stop it entirely. To try to stop the slaughter of game through laws restricting the bag and the season, without first closing the markets, is like trying to build a wall from the top down. It might be done, but a lot of time and money will be wasted in the attempt. Since the Lacey bill was passed, and the sale stopped in our State, less game is being killed. Men who were formerly market hunters, doing nothing else from September 1 to December 1, and after that spending their Sundays in killing for the market, which seemed to be as open after the season closed as before, have been put out of business. They now hold down a job at any old price, hunting little, simply because there's no market. Under the Lacey law and our laws combined, we can make it so hot for a Michigan violator that he will think Hades an icebox as compared with this State. The result is that we are having less chances at violaters than formerly, but are getting a bigger percentage of convictions. Nowadays when our game wardens get after a man his "goose is cooked" so often that others stop taking chances. Any other method will be slow, tedious, expensive and inefficient.

J. E. Pratt, Grand Rapids, Mich.

FROM EAGLE PASS TO TAMPICO.

I spent some weeks last winter hunting in Mexico. On the way down I stopped at Eagle Pass, Texas, and camped 3 days with Messrs. Bonnet and Delsalona, who are the best hunters at that place. We were all armed with Savage rifles, as were most of the sportsmen we met. Our camp was in the brush about 15 miles from Eagle Pass. All night we could hear bucks fighting in the woods, and coyotes kept up a continual howl from 10 o'clock until dawn. On the first morning of our stay we found a buck near camp. He was at the opposite side of an open space about 80 yards wide. I aimed just forward of the point of his shoulder and fired. The buck ran a few feet and dropped. Delsalona came running up and asked if I got anything. "Surely," said I, as coolly as if I had done nothing all my life but shoot deer. In fact, however, it was the first wild deer I ever saw.

The region is an ideal one for hunting. Deer are abundant, the brush is not too thick and there are plenty of water holes. There are blue quails without number, and a few Bob Whites. Ducks may be had, during their season, at the water holes.

From Eagle Pass we went to Tampico, Mexico. The intervening country consists of mountains and valleys. The lower levels are densely covered with brush and cactus, and abound with deer, panthers and bobcats. About 20 miles South of Victoria there is also abundance of large game, but hunting must be done at night with a jacklight. In the lagunas all along the coast are thousands of ducks, geese, herons and aquatic birds.

Mexico has no game laws that I could discover. The Visitador Politico will give a permit to shoot on the lagunas and rivers, and it is considered polite to ask permission before hunting on fenced ground. Above all don't try to bully the natives lest your life insurance people have to cash your policy.

Dr. M. C. Hoag, Nevada, Ia.

FEED THE BIRDS.

The cause of the persecuted birds appeals to me strongly, and with pleasure I have noticed an increase in the number of birds this winter. The year before last there were none about us; last year a few came to us for shelter and to be fed; this year fewer are being killed. During the winter storms, no doubt, the little birds we fed would otherwise have perished, as thousands did, throughout the country. The air would at times be full of birds coming to feed; the juncos, sparrows, bluejays, and an occasional purple finch, on the porch after bread crumbs, nuts or cracked corn. The nuthatches were also interested with the woodpeckers in the suet we had nailed to the trees. The little brown creepers were very independent, coming to the closely neighboring trees but not seeming to depend on us as the other birds did. I wish lovers of nature would awaken to the needs of the birds during such storm periods, when the seeds of the meadow grasses are icebound and the table of the birds is so sparingly spread. There are many tragedies in their little lives and some of them might be prevented by human pity and thoughtfulness. The cause of the poor little grebe, whose solitudes have been so remorselessly invaded, has greatly interested me; those brave, beautiful little creatures who give themselves, a cheap sacrifice, in trying to save their young. They have been killed by thousands through the barbarous desire of women to deck themselves in stolen feathers even at such a cost in anguish. The grebe, like the egret, must soon be annihilated if women persist in demanding their slaughter. Every true woman should bear the thought of them with her and should do all in her power toward forming the opinion of thoughtless women who stoop to wear these beautiful innocent breasts. Women of good taste scorn all such base traffic.

Georgiana K. Holmes, Summit, N. J.

SCORES A GLOBE-TROTTING HOG.

Recently I came across a book entitled, "Sport and Travel, East and West," by F. C. Selous, published in 1900.

In it Mr. Selous describes a hunting trip he took in Wyoming in 1897, starting on the Eastern slope of the Big Horn mountains and traveling to a point just outside of the Yellowstone Park. The start was made September 1st, and their expedition lasted until the middle of November. During that time Mr. Selous acknowledges killing 2 antelope, one ewe mountain sheep, 8 bull elk, 8 buck deer and one doe. Three elk and one deer were killed in one day. He speaks of other members of the party killing game, but those I have mentioned he killed himself.

All he took of the elk was the heads. He says the trappers used the meat for bear bait. He sympathizes greatly with the settlers who kill game, if they do not waste it, and then talks about the way game is disappearing from the United States in spite of our game laws. That seems to worry him a great deal, and he regrets he was not here when elk, deer and buffalo were plentiful. The following year he returned for a shorter trip, during which he killed only 4 elk and 4 deer. He seemed greatly troubled that he did not get more. What he particularly wanted was fine heads, but he evidently killed the elk first and examined the head afterward.

It seems to me we have enough game hogs at home without importing any from Great Britain. Mr. Selous may be a great hunter, but I do not think he is much of a sportsman. From the way he writes he evidently would like to come back some time for more game. It would be a blessing if the game wardens of Wyoming could catch him out there, as his book is good evidence of his absolute disregard for the game laws of this country.

W. J. F., Chicago, Ill.

WEST VIRGINIA'S GAME.

Not for 15 years has game been more plentiful than at present in and about Romney, W. Va. Several reasons have been advanced for this. One theory is that owing to forest fires in Maryland and the Western part of this State deer have been driven in here in large numbers. Then we had a close season, or practically so, for 3 years, and deer have had an opportunity to breed unmolested. Another reason is that the citizens of Hampshire county do not allow the hounding of deer. Consequently at the opening of our season deer were plentiful, and over 40 were killed within 6 miles of this town.

Our game laws are good but are not enforced. We have a State game warden, but no deputies. Our law which requires non-residents to pay $25 for a shooting license is unwise. Instead of protecting game, it gives license to native game hogs and pot hunters to kill all the game they can and sell it. During 15 years I have met most of the sportsmen who come to this county to hunt, and all of them spend $10 for every dollar's worth of game they kill. Besides, to my mind, it is most unjust to demand money from a sportsman and then give him no place to hunt. The State has no hunting lands, and farms are generally posted.

We have good ruffed grouse shooting. Our quail shooting was not so good, as the past severe winter froze most of the birds. We have lots of rabbits. This year squirrels were scarce. Wild turkeys are plentiful.

Romney is on the South branch of the Potomac, and is famous for its black bass fishing. It is understood that an effort will be made to pass a license law for the fishing. If they would enforce existing laws we should need no other legislation on the game subject in this State.

J. B., Romney, W. Va.

PROTECT GREYS BY LAW.

January Recreation contained, among other good things, an editorial with which I am in hearty sympathy, namely, "Save the Grey Squirrel." Your appeal for the squirrel is timely and what I have long hoped for. The squirrels, grey, red and chipmunk, are a harmless group. If I had the making of the laws I would protect all 3, and along with them the crow, owl and hawk; all thieves and tricksters, perhaps, but all useful to the farmer.

Against the grey squirrel the farmer has lodged no complaint, so from that source a bill for its protection would have no opposition. The strongest opposition would come from the man who has a day off and shoots everything in sight, and from the small boy. These are the fellows who shoot robins, meadow larks, blue jays, etc., as well as the birds and animals the law allows him. Ernest Seton's "Daddy Binks" is a good illustration. The squirrel tails and bird wings are used to decorate his room and to show his admiring friends, telling them how he killed 2 dozen squirrels, etc. The small boy with a gun would send up a wail, but I would cause him to wail more by making any boy under 18, who wished to use a gun, give bonds to the county game warden.

No real sportsman would offer any opposition to a law to protect the grey squirrel. Why not get a bill before the Legislature this session? If every reader of RECREATION in New York State would agitate this matter, and write to his assemblyman and senator, a law could be enacted this winter that would put our State to the front in the matter of protecting animals as well as protecting the public by medical laws. Your articles on the game hog are all right, only you do not hit him hard enough to suit me.

H. V. Shelley, Ridgebury, N. Y.

PUT HIM BEHIND BARS.

I think it my duty to write you about a game hog in Stratford, Conn., a notorious duck hunter named Charles Wicks. Last winter he sculled out on Long Island sound and shot 160 ducks in less than an hour with a 4 gauge gun. They were broadbill and black ducks. This man makes a business of duck shooting.

Clifford H. Platt, Milford, Conn.

I wrote Wicks regarding this matter. His answer follows:

Your letter at hand. In reply will say that I killed 132 ducks in about one hour. I could have killed 3 times as many, but when the man with me counted and said I had over 100 I said I had enough. There are lots of broadbill here at times.

Capt. Charles D. Wicks, Stratford, Conn.

It is strange indeed that a man of your apparently swinish disposition should be satisfied with so small a number of ducks as 132 in an hour. I am surprised you did not keep on as long as there was a duck in sight and load up your boat even if you had to make one or more trips to the shore to unload, and go back. It would have been like the general run of your breed to do this. As I have often said, it takes a gentleman to quit when he gets enough, but you evidently do not aim to be in that class. You are of the kind that believes in killing as long as there is anything in sight. I hope we shall soon have laws in all the States that will result in putting such men as you behind the bars for a long term for such acts of slaughter as you admit having committed in this case.—EDITOR.

THE GAME FIELDS OF IOWA.

Although Iowa is not regarded as a game field it contains much small game. For quail shooting, last season was the best for years, being even better than the previous season, which was remarkably good. The winter has been mild and the outlook is favorable for good shooting next year. The quail is not the easiest thing to hit, as all sportsmen know, and if one gets 5 or 6 birds he is doing well. An old hunter recently remarked that when all other game birds shall have been exterminated the quail will still remain. How true this is we will soon be able to tell if the game laws are not heeded better than they are now.

Prairie chicken shooting was not so good as was expected. The birds were badly scattered when the season opened, apparently having been shot at before.

Duck shooting began September 1, with the teal that breed in Iowa, and lasted until the 1st of December. Mallards were unusually plentiful, though they are not often abundant in Iowa.

The State still permits spring shooting, and State Warden Lincoln will try to have a law passed during the coming session of the Legislature prohibiting it.

The small fur-bearing wild animals are becoming plentiful and trappers make a fair living. Cottontail and jack rabbits give much sport during the winter, and were abundant last year.

Surely Iowa is a good hunting ground; all it needs is a better enforcement of the game laws.

Geo. J. Bicknell, Humboldt, Iowa.

AN OREGON HIDE HUNTER.

We have in our State a few low-down, contemptible deer hogs. One of these animals was arrested this summer with 1,500 deer skins in his possession. He was too lazy to work, but would slink around in spring and summer and kill does with fawns, simply for the pelts. He had followed the same vocation for years. When at last the hand of the law was laid on him he paid a fine of $100 and costs, whereas he should have been hanged.

I hope the law passed by our last Legislature will prevent further brutality by such beasts. Under this law one may not sell either the flesh or hide of deer at any time; neither can he sell grouse, pheasants or quails for 5 years. This will allow an increase sufficient to again give us an abundance of good sport.

In July I had some fine sport trout fishing. I caught in one hour all our party could use in a day. Never before have I found trout so plentiful; the water seemed alive with them. I did my fishing in Silver creek and Canyon creek, in Southeastern Oregon.

The open season for Mongolian pheasants began October 1. One does not see such wanton slaughter as in former years, owing to the fact that the birds can not be sold. The law prohibits the killing of more than 15 birds in one day by each hunter. Two friends and I returned from a hunt last week with a nice bag of birds. We killed in 1½ days 34 birds. Pheasants are scarce owing to late, cold spring rains.

G. W. A., Portland, Ore.

EVADE THE QUESTION BUT NOT THE PEN.

Al Otness, Charles W. Seed, Ed. Flues and Ed. Young returned from Harney lake last night, where in 1½ day's shooting, they killed over 300 ducks and geese, bringing in with them fully 250. They claim to have run out of ammunition; otherwise the slaughter would have been greater. They also say the country is alive with grouse, prairie chickens and sage hens and a band of about 50 antelope was seen, but not near enough to invite a shot.—Sumpter (Ore.) Miner.

To my inquiry Seed and Flues replied as follows:

Your letters of recent date regarding the killing of 300 ducks were forwarded to me from Sumpter. Unlike the illustrious father of our country, I can not say "I did it with my little" gun; nor can I bring myself to believe that I ever killed such an awful number of ducks.

Chas. W. Seed, Denis, Ore.

Yours in regard to the killing of 300 ducks and geese in 1½ days: It is not the part of wisdom to believe all you see in the newspapers. However, I am willing to admit that, had we the inclination and ammunition, we could have killed 5 times as many ducks in the time stated.

Edwin Flues, Sumpter, Ore.

It will be noticed that both of these men evade the question. They do not state how many ducks and geese they did kill, and it is reasonable to assume, therefore, that they are guilty of the charge made against them by the Miner. Seeds, Flues and Young are, therefore, fully entitled to wallow in the hog pen.—EDITOR.

DEER INCREASING IN NEW YORK.

I refused 5 chances to shoot at immature deer, and killed no deer at all in 1901. Deer were more abundant when that season ended than when the season of 1900 began. There were a few hounds used in this region last year, but some of them did not get back home. A few hunters here who used to believe in hounding, gave it up in '97 and do not permit others near them to practice it, either. They get more venison by still-hunting, and there are 6-fold more deer than 5 years ago. Then a deer out in the fields was a rare thing. Now, in season, I can take you to an orchard not 100 rods from my dwelling where many deer come nightly for apples. It is the same everywhere in this region; deer have become numerous since the law of '97 took effect. I hope it will be re-enacted.

I protest against the widespread use of the term "pot hunter" as a synonym for "game hog." Originally it was applied to one who killed game for his own dinner pot, and took care to make every shot tell. He certainly was not a wholesale game exterminator, an all around market hunter, or a game hog. Those names are plain United States for the men we are opposing. I prefer to write myself a pot hunter of the old school. The game laws are for all the people alike, and it is to secure the greatest good to the greatest number that we obey and uphold them.

Rodney West, Minerva, N. Y.

WYOMING PEOPLE SHOULD WAKEN UP.

Do you, can you, realize what a hard proposition we have to face out here in our beloved Wyoming, the last stand of the big game of the West? There is more indifference shown in this matter here than anywhere else. The people do not seem to care. They find fault with you for roasting the game hogs, but appear to lose sight of the fact that you are doing lots of good. Even the majority of the guides in this neighborhood censure you for your roasts. I wish to God we could get them to realize that our big game is going fast, and that if more stringent measures are not taken to protect it, it will soon be a thing of the past. Perhaps a change will come before it is too late.

The antelope are just about gone in the Bighorn basin. When I first came here, in '89, they were numerous.

Elk, deer, bighorn and moose are still in goodly numbers, but how long will they last if our citizens do not take an interest and see that the game is properly protected? My advice, from the standpoint of a hunter and guide, is to restrict residents and non-resident sportsmen to the killing of one male animal of each kind of game in one season, and attach a heavy penalty to the killing of any females. That is the only hope for the big game of Wyoming.

Jas. L. McLaughlin, Valley, Wyo.

A NEW SPECIES OF BEAR.

Referring to the article, "An Adirondack Bear," by Dr. Bassler, in September RECREATION, I should like to know what kind of bear that was. I have seen many bears, but never one with a white belly. In 1858 I was living in Northern Wisconsin, and bears were abundant. There was an Irishman living about 3 miles from the settlement. One moonlight night he heard a disturbance in his hen house. He grabbed his old musket, woke Bridget, and sallied forth on a bear hunt. He stood by the door, while Bridget, by making a racket at the back of the building, drove the brute out. Pat rolled him over most beautifully. Pat and Bridget then proceeded to skin him, and nailed the hide on the side of the house. The next morning Pat distributed bear meat about the settlement until every family was supplied. Two weeks later one of the neighbors happened to pass Pat's cabin, and seeing the skin nailed up asked Pat whose dog he had killed.

"Begorry," said Pat, "that is the bear."

It proved to be Jim Wilson's black dog, one of the worst renegades in the country. Everybody was glad the dog was dead, but did not seem overjoyed at having helped eat him. I think Dr. Bassler's bear was of the same species.

D. E. Packard, Belmont, Ia.

THE JUDGE WAS WRONG.

> A fine of $700 and costs was the sentence imposed on Ira Arnold by Trial Justice Spencer in police court recently. Arnold lives on the outskirts of the village and had been snaring grouse. Game Warden Stanley, of Standish, heard of it and came here last week to investigate the matter. He placed Arnold under arrest and had him arraigned in police court for snaring 140 ruffed grouse in violation of law. The respondent pleaded guilty and said he did not understand when he snared the birds that he was committing a serious offence. Justice Spencer imposed a fine of $5 for every bird snared, $140 in all. Realizing that the respondent would be unable to pay the fine and that the county would be obliged to support him in jail almost 6 years while he would be working it out, the court suspended sentence during good behavior.—Dover (N. H.) Paper.

The judge was unduly solicitous as to the expense of boarding Arnold in the county jail. It need not cost more than 10 cents a day to feed such a shoat all he needs and all he deserves, and he should have been compelled to board out his sentence. He has stolen from the public a large quantity of game that has actual food value, and now that he is allowed to run at large he is likely to steal chickens or sheep or any other property he can get his hands on. It would no doubt have been money in the pockets of the tax payers in that county to have had Arnold locked up for 6 years.—Editor.

GAME NOTES.

I had a few weeks to spare last fall and thought I would try the ducks on the Mississippi. Found fall shooting there a thing of the past; there was no water and I could not induce a duck to even look down. Then I concluded to revisit my old hunting ground on the Illinois, where I used to shoot when the United States was a free country. Every place where a duck might possibly alight had been bought up or leased. When I came away I saw 470 mallards put on the train, tagged to Hough & Sherman, Chicago, from Powers Bros. All the birds had been killed in one day by 3 shooters on a "preserve." When they butchered, a few days previous, they got only 320 mallards. A dozen sportsmen left on the same train with me, and there were not 10 ducks in their combined bag. You see they had no money to invest in swamp land. I should like to see the marshes open to rich and poor alike. The next best thing would be a law limiting the kill to 25 a day on private as well as on public land.

O. Timer, Chicago, Ill.

One of the best signs of the times, and something for which I give you, personally, full credit, is the attitude which one of your contemporaries has taken the past year in regard to the game hogs. Some of his roasts are very like yours, and if yours were copyrighted he would be adjudged an infringer. This attitude of a sporting editor, who formerly never opened his head anent such things, simply proves that the leaven you have injected into the matter has produced a healthy sentiment on the subject, which will eventually become the only popular one.

Dr. E. B. Guile, Utica, N. Y.

Yes, the other editors are gradually getting in line. Their readers demand it, and the editors find they must join me in the crusade or lose their circulation. Even the A. D. G. H. will have to come to it yet or shut up shop. Wont it be gall and wormwood for Reynolds? Think of his roasting his old friends! Gee whiz.—Coquina.

I fully agree with you that if something is not done quickly to stop the slaughter of big game it will become extinct. I have seen, since I came to Montana in 1895, a rapid decrease in game, especially of the deer family, and recognizing the necessity of immediate action, I was one of those who first agitated the formation of the State Fish and Game Protective Association.

Some of us had hoped to close all elk, antelope, and mountain sheep killing for some years, but we only succeeded in the cases of antelope and sheep. A few of us fought vigorously in behalf of the elk, but were doomed to disappointment at this time. The members of our association have decided that the L. A. S. is the only power that can secure th eenforcement of the game laws in Montana. If we can have a federal law, together with game preservation in forest reserves, much good will be accomplished.

Geo. B. Sproule, Helena, Mont.

I have been for some time a subscriber to Recreation, and I frankly confess it has brought me to my senses as far as true sportsmanship is concerned, and taught me to avoid becoming one of those bristlebacks you so frequently and justly roast. I have for the past 3 years spent a few days each season hunting deer in the Adirondacks, and am glad to say I never shot at anything but a buck. For the man who spends only a few days each season in search of big game, the temptation to shoot anything that comes in view is almost irresistible unless he has been taught that such an act is brutal as well as unsportsmanlike. Let us hope that every hunter may digest a few numbers of Recreation before entering the woods; then there will always be good hunting and plenty of game.

W. J. Delap, Stamford, Conn.

You are doing more good than you perhaps realize by interesting the various Indian agents in game protection. Mr. W. H. Smead, of the Jocko Agency, has done a world of good in the past 2 years, and his Indians are fast becoming model sportsmen. The Nez Perces Indians still continue to slaughter elk in the Clearwater country during July and August. You would do well to write their agent. Last summer the Indians were hunting in the Clearwater district and killed and dried at one place some 30 elk. As they were drying the meat, 3 Idaho forest rangers, who are also game wardens, arrived, and though they stayed there 8 days, they did not even remind the Indians that they were violating the law.

A. E. Hammond, Darby, Mont.

I understand "Judge" Fisk is going to sue you for denouncing the hoggish work he and his gang of fellow swine did at Bemidji. That certainly will do him no good, whether he wins or loses the case, for the sportsmen know he is a genuine bristleback, and the louder he squeals the farther he can be heard. You have done him no wrong. He has disgraced himself among all true sportsmen, and the only way to come out of it, is for Judge Fisk to repent of his sin, ask the sportsmen of Bemidji to forgive him, and promise to be a good boy in future.

Long live Recreation and its fearless editor. Continue to roast game and fish hogs until they all reform.

L. A. Arundson, L. A. S., No. 1956.
Moscow, Idaho.

Some counties in Washington realize the need of game protection and try to secure it. A few go to the length of enacting gun license laws. That, of course, shuts out the improvident pot hunter, but does little to restrain the wealthy game hog. Other counties show no concern in the matter, and in them the hog is rampant and patted on the back by the local press. Our greatest game hog, *Swinus maximus*, is, *vide* the Spokane Chronicle, one John Cochran. He is not satisfied with shooting a cart-load of ducks in 2 days. He must needs go back the next week, with others of his kind, to butcher more. I have not heard how he made out, but I hope his gun burst and blew his bloody head off.

J. A. Cottle, Spokane, Wash.

Adolph Bonner, a cabinet maker of 824 Grand avenue, and Charles Koelle, a saloon keeper, of 119 Saltonstall avenue, were tried before Justice Grove J. Tuttle in the East Haven court, charged with violating the game laws. The men were accused of shooting a deer in the East Haven woods December 31st. The arrests were made by Deputy Sheriff Beach, of North Haven. Witnesses testified that they saw Donner and Koelle load the deer they had killed into a wagon and carry it away. The deer that was shot, it is believed, was one that was rescued from captivity by the game warden a year ago at Morris Cove and turned loose in the East Haven woods. Donner and Koelle were each fined $100 and costs.—Exchange.

Served them right. Beach is a corker. This is by no means the first record he has made in the cause of game protection and I trust it may not be the last.—Editor.

Our local police chief and assistants, also our judge, have promised me they will do all they can to help enforce our game and fish laws and the first case brought before the judge will get the full penalty, so as to make it a good object lesson. The principal of our public school is going to present one of the L. A. S. posters before the pupils in all the rooms, and thoroughly explain its meaning, especially regarding birds' nests and eggs and destroying our song birds.

Fred. W. Whittle, Northfield, Minn.

Game in this section is increasing rapidly since the passage of the law prohibiting the sale of ruffed grouse and woodcock. There were 3 men here who shot for the market, and without doubt they killed 5 times as much game as the other residents of the town. A law prohibiting its sale is the only law that really protects game, for if the market hunter can sell game he will kill it, in season or out. It is easy to kill game illegally, but quite another proposition to sell it illegally.

E. C. Hall, Ashfield, Mass.

While staying last summer in Coffeyville, Kansas, a city of 6,000 inhabitants, I was surprised to hear the whistling of quails. Going to the window I saw 3 of the birds on a building opposite and 15 or 20 more in the street and on the sidewalk. I was told there are 100 or more in the city, the descendants of a pair that came in 3 years ago. The city has taken them under its official protection, and they are almost as tame as chickens.

C. H. Tucker, Parsons, Kan.

Our snipe shooting has just closed, to-day's bags being 5, 3 and 2. Plover and curlew, from the 10th to the 25th of May, are fine on our meadows.

Quails have bred in great numbers this year, but woodcock have been thoroughly cleaned out by pot hunters the past 3 years. Our county is a great breeding place for this bird, and has furnished excellent sport. We expect an abundance of summer ducks.

Henry E. Byrd, Temperanceville, Va.

Warren Montgomery brought down a large buck with fine antlers, weighing 330 pounds, Monday morning. Mr. Montgomery shot 2 in Canada and 2 in Maine, while on his hunting trip. Since his return home he has had exceedingly good luck this being the second one.—Exchange.

Six deer in one season, eh? That is equal to the record of the lowest and most disgraceful market hunter or skin hunter to be found anywhere. Montgomery certainly has a good big crop of bristles.—Editor.

Deer were plentiful here last fall and many large bucks were shot. There were also a few moose. Bear, wolves, lynx, foxes, grouse and rabbits are plentiful. We have good trout and pickerel fishing. Our law permits dogging deer, but the settlers curse the law, and have good reason for so doing. Even if the deer escape the hunters who watch at the lake shore, the cold bath after miles of running kills many deer John Burn, Rye, Ont., Can.

I understand there is a movement on foot in New York to stop grouse shooting for 3 years. I hunted many years in your State, and know the habits of the grouse and its enemies. If a bounty were put on foxes the birds would increase rapidly with no other protection than is afforded by existing laws. Foxes destroy more birds than pot hunters, snarers, hawks, skunks and all other vermin combined.

W. Hodgson, Calverton, Va.

Ohio has good game laws now, but I see by the papers that our city men want them changed. They do not like to ask land owners for permission to hunt. The law should remain as it is. It enables farmers to shut out men known to be pot hunters or hogs. At the same time it preserves game for decent sportsmen, who are seldom refused the privilege of hunting if they ask for it.

E. L. Cramer, Richmond, O.

Last year a friend induced me to subscribe for Recreation. At first I did not like its stand in regard to game hogs, nor its opposition to spring shooting. Since reading your magazine a year I have come to the conclusion that it is wise and proper to prohibit spring shooting and to limit the number of birds to be taken in a single day or during the season.

C. A. Duncan, Timnath, Colo.

Will you kindly tell me through Recreation a good preparation to use on leather hunting boots to keep the water out?

R. C. S., Elgin, Ill.

ANSWER.

Use Collan oil, advertised in Recreation.

Quails are abundant here. During a 2 weeks' hunt last fall I killed 20. I could have killed that number each day, but since reading Recreation I have learned not to kill everything within sight.

B. W. Farr, Erie, O.

A blue homing pigeon has come here marked on metal tag, 166|99 E. M. Doubtless some of Recreation's million readers want to know its whereabouts.

E. L., Tiffany, M. D., Wilson, N. Y.

What black duck shooting we have is controlled by a Toronto club. We still have a few fall ducks, but one is lucky to get 6 or 7 in a day.

S. E. Sangster, Port Perry, Ont.

Game is plentiful here, especially quails, and the prospect for next season is good.

C. W. Castle, Morris, Conn.

THE COONS.

W. L. GILLETTE.

They grew in beauty side by side;
They filled one stump with glee:
Now one is stuffed, the other fried;
'Tis sad as sad can be.

Too much of one poor farmer's corn
They ate, the night before;
A colored youth, with gun, next morn
Soon balanced up the score.

One poses now, lifelike and real,
O'er him each pilgrim jokes;
The other one just made a meal
For Rastus Johnson's folks.

Browne.—"Who is that clumsy woman dancing over there?"

Greene.—"I don't know, but certainly hers is not a horseless carriage, is it?"—Exchange.

FISH AND FISHING.

ALMANAC FOR SALT WATER FISHERMEN.

The following will be found accurate and valuable for the vicinity of New York City:

Kingfish—Barb, Sea-Mink, Whiting. June to September. Haunts: The surf and deep channels of strong tide streams. Baits: Blood worms, shedder crabs and beach crustaceans. Time and tide: Flood, early morning.

Plaice—Fluke, Turbot, Flounder. May 15 to November 30. Haunts: The surf, mouth of tidal streams. Baits: Shedder crabs, killi-fish, sand laut. Time and tide: Ebb, daytime exclusively.

Spanish mackerel—Haunts: The open sea, July to September. Baits: Menhaden, trolling—metal and cedar squids.

Striped Bass—Rock Fish, Green Head. April to November. Haunts: The surf, bays, estuaries and tidal streams. Baits: Blood worms, shedder crabs, Calico crabs, small eels, menhaden. Time and tide. Night, half flood to flood, to half ebb.

The Drums, Red and Black. June to November. Haunts: The surf and mouths of large bays. Bait: Skinner crab. Time and tide: Day, flood.

Blackfish—Tautog, April to November. Haunts: Surf, vicinity of piling and old wrecks in bays. Baits: Sand worm, blood worm, shedder crabs, clams. Time and tide: Daytime flood.

Lafayette—Spot, Goody, Cape May Goody. August to October. Haunts: Channels of tidal streams. Baits: Shedder crabs, sand worms, clams. Time and Tide: Day and night flood.

Croker—July to October. Haunts: Deep channels of bays. Baits: Shedder crabs, mussels. Time and tide: Day flood.

Snapper—Young of Blue Fish. August to November. Haunts: Rivers and all tide ways. Baits: Spearing and menhaden; trolling pearl squid. Time and tide: Day, all tides.

Sheepshead—June to October Haunts: Surf and bays, vicinity of old wrecks. Baits: Clams, mussels, shedder crabs. Time and tide: Day, flood only.

New England Whiting—Winter Weak-fish, Frost-fish. November to May. Haunts: The surf. Baits: Sand laut, spearing. Time and tide: Night, flood.

Hake—Ling. October to June. Haunts: Open sea surf, large bays. Baits: Clams, mussels, fish. Time and tide: Day and night, flood.

Weak-fish—Squeteague, Squit. June to October. Haunts: Surf, all tideways. Baits: Shedder crabs, surf mullet, menhaden, ledge mussels, sand laut, shrimp. Time and tide: Day and night, flood preferred.

Blue Fish—Horse Hackerel. June to November 1st. Haunts: Surf, open sea and large bays. Baits: Menhaden, surf mullet and trolling squid. Time and tide: Daytime; not affected by tides.

FISHING GOOD IN YELLOWSTONE RIVER.

Park City, Montana.

Editor RECREATION:

In your department of fish and fishing in January RECREATION an article signed "Independent" would lead readers to believe that the Yellowstone river, between Columbus and Billings, is ruined as a trout stream by the dumping of coal slack. He says the river varies from a murky color to an inky blackness. Farther on he says the water at Columbus is so thick it is ruined as a trout stream. I do not wish to attempt any defense of the coal companies, but only that the truth of the matter should be known. As I have lived for the last 7 years on the Yellowstone about midway between Billings and Columbus and have always been much interested in the fishing, I have spent much time on the river. I have never at any time seen any sign of the washing of coal mentioned. During high water of early summer our river carries an immense volume of muddy water, as do all mountain streams; but during all moderate stages of water it is clear as crystal, and there are plenty of good fish left. The Yellowstone at Billings nas never been much of a stream for trout, running as it does for 25 miles West of Billings through banks of clay and taking much waste water from irrigation ditches. Water at that distance from the mountains usually is too warm for trout, although a few are caught as low down as Billings; while at Columbus and for 20 miles East of there the fishing is excellent. I think I will be sustained in this statement by any fair minded citizen of either Billings or Columbus.

I am better pleased with RECREATION each year. The L. A. S. members here are trying to protect what little game is left, and the laws are well kept; but we greatly need a law prohibiting spring shooting, as if that were stopped a great many ducks would nest here that are now killed or driven away.

There are still a few antelope on the ranges North of here, and if the present law is upheld they will increase. Wolves and coyotes are quite plentiful. A few beaver are still found along the river, while sharptail and sage grouse are fairly numerous.

B. F. Harris, L. A. S., 3826.

AT GOODLUCK LAKE.

About the middle of June, '94, I went for my second camping trip among the foothills of the Adirondack mountains. There were four of us: Tip, the guide, Bob, Sid and I.

We started from Bob's house about 9 p. m., as the roadway was bad and the horse could travel better in the cool of the night. We stopped for breakfast at a deserted house near Pine lake, but the mosquitoes and punkies were so thick that we stayed only long enough to feed the horse. Our camping ground was reached about noon. The place we selected was on the shores of Goodluck lake, at the headwaters of the Sacandaga river. After pitching our tent and building a stall for the horse, Tip and Sid took a boat and in a short time had fish enough for supper. Bob and I went with another boat to cut swale grass for the horse. The next morning we built a fish-box in which to keep our fish alive.

The fishing was good, trout and pickerel falling easy prey to our tempting bait. We were careful not to make hogs of ourselves, however, and took only enough fish each day to supply our wants. Ducks, grouse and woodcock were abundant in the woods on all sides of the lake, but as it was the close season they were perfectly safe from our guns. The creeks around abounded in trout. Mosquitoes, punkies, black flies and deer flies were also numerous. We spent a pleasant week among the mountains, hunting, fishing, rowing and swimming.

A. B., Sacandaga, N. Y.

BLUE HERONS DESTROY TROUT.

I note W. L. Steward's article in February RECREATION in regard to the blue heron destroying young trout. I know, to my sorrow, that the ungainly bird is an expert fisher. A friend of mine near here owns one of the finest trout streams I ever saw. Being no angler himself, he has occasionally asked me to visit him and try the trout. The brook was so full of them that it was no trick at all to take a dozen fine fellows in an hour. One summer the fish seemed few, and we wondered why. We had noticed blue herons wading in the stream, but never dreamed they were the cause of our poor luck. One day my friend said:

"Doc, I know what's the matter with the trout. It's them darned cranes."

Enough said. Out came the 38 caliber Winchester, and every blue heron heard the hum of lead, and the bones of several lie along the stream. The living ones left those parts to return no more.

Now, after 2 years, as I steal up to the bank and look over, it is not uncommon to see a red streak dart from cover; and down under that clump of willows I hear again the splash of some fine fellow as he takes in a grasshopper that made a mistake and did not jump far enough. Personally I have no use for the blue heron. He is a genuine fish hog.

F. G. Legg, M.D., Coldwater, Mich.

TROUT ABUNDANT NEAR VANCOUVER.

I have taken RECREATION nearly 2 years. It is the best magazine of the kind published in America. I like the way you roast pork. It is too bad, that men who are supposed to have some common sense, show such a lack of it every chance they get to make a good bag of game or basket of fish.

Our trout season has just opened, and I hear of good baskets having been made. But good stream fishing does not begin till about May, as our streams are mostly mountain streams, and the snow melting in the spring makes the water high and dirty.

We have several streams within easy reach of Vancouver, the best of which are the Coquitlam and the Lillooet. I have not fished on the former, but persons who have say the fishing is excellent. This stream is about 20 miles from the city. The Lillooet is about 30 miles. I spent 3 or 4 days on this stream last summer and had some good catches. One afternoon I fished from about 2:30 p. m. to 5 and caught 14 fish, which filled my basket. They ranged from ¼ pound to 3½ pounds.

Being an amateur photographer, your photo competitions interest me much.

W. G. B., Vancouver, B. C.

TROUT HOGS ON THE POTLATCH.

Idaho has some of the best trout streams in the world, though people who have not visited the Bitter Root mountains can not realize this.

In August, 1901, 4 of us cast our lines in the Potlatch, and a happier, more congenial crowd never got together. The great trees permitted the welcome rays of the sun to reach the earth, thereby insuring us plenty of sport. The weather was delightful, the air laden with the odor of pines, the fishing all that heart could desire. No sooner had we entered the water than we saw trout, ranging from 6 inches to ¾ of a pound, darting in all directions. Small bunches of moss grew in the river, and behind these we made our casts. No sooner did the fly touch the water than it was snapped up. It is at such moments as these that we lose all consciousness of everything else.

In the one day we took enough trout to supply our tables a week, the total catch being 609 for the day.

J. D. Jolly, Troy, Idaho.

Over 150 trout for each man. You should all be ashamed of yourselves.—EDITOR.

ACTIVE WORK IN WISCONSIN.

The game and fish wardens of Wisconsin are making this a mighty hard year for lawbreakers. Here is a synopsis of their work during the past few months:

Deputy George Briggs, of Ashland: 5 arrests and convictions for taking whitefish weighing less than 1½ pounds each. Several cases unsettled. Deputy Peter Drafahl, of Afton: Seizure of fish and set lines at Lake Koshkonong. Deputy A. W. Gratz, of Madison: Seizure of fish. Deputy Fred Gerhardt, of Milwaukee: 3 seizures of fish and game. Deputy A. J. Klofonda, of Eau Claire: Arrest and conviction for shooting ruffed grouse. Deputy K. Knudson, of Winneconne: 2 seizures of fish and nets. Deputy Gustav Pfeiffer, of Sturgeon Bay: Arrest and conviction for shooting deer. Deputy Val Raeth, of Milwaukee: 5 seizures of fish, one being of brook trout. Deputy G. K. Redmond, of Neillsville: 2 arrests for shooting deer, one of the defendants being convicted and the case of the other continued. Deputy J. W. Stone, of Barron: One arrest for shooting deer and having possession of a redcoat; case not settled. Deputy Stone and A. A. Lavalle, of Shell Lake: One arrest for shooting ruffed grouse and one for having possession of 6 saddles of venison; cases not settled. Deputies M. F. Carpenter, of Foud du Lac: Julius Waite, of Appleton, and K. Knudson, of Winneconne: Arrest of 10 fishermen on Lake Winnebago and seizure of 24 miles of set lines, 3,400 feet of sturgeon nets, 2,800 feet of gill nets, 12 spears and 1,000 pounds of fish; case not settled.

FOR ILLEGAL FISHING.

Samuel P. Monroe, of Old Lyme, and Albert T. Crittenden, of Westbrook, for illegal fishing on a Saturday evening in the Connecticut river, were brought before the superior court and pleaded guilty. They were each fined $100 and costs, the penalty prescribed for the offense.

Monroe is a justice of the peace in the town of Old Lyme, and was formerly a game warden. He and Crittenden were caught by Constable Bugbee, of East Hamden, violating the law forbidding the taking of shad from sundown on Saturday until sundown on Sunday. They were tried in the justice court, found guilty and took appeals to the superior court. They were under bonds of $150 each until the cases were called in the superior court. Monroe submitted to the court a petition that he was an honest and industrious man. The petition was signed by a number of residents of Old Lyme. He has served several times on the jury in the supreme court for New London county.—Norwich, Conn., Paper.

Justice, like death, loves a shining mark, and surely ex-Justice and ex-Game Warden Monroe is a good target for the blind goddess. I am glad she whacked him good and hard, as well as his fellow law breaker. —EDITOR.

NIBBLES.

The great interest with which I have read your gun and ammunition department now turns to fishing and tackle. June opens our season for trout and I should like to tell brother anglers of the flies I have used for 2 years. Several times this past season I picked up exceptionally large trout from a stream which had been whipped to death all day. Anglers I met on the stream, who were out of certain flies and borrowed some of the patterns I had, were much more successful. These flies were tied by Howarth, of Florrisant, Colo., and I never have seen similar patterns from any other maker. I believe anyone who will try a few samples of these flies will thank your magazine for stating where they can be obtained.

Colorado's 8-inch trout law is stocking the streams with good, vigorous trout, of a size it is a pleasure to catch.

R. J. Rowen, Leadville, Colo.

The Cleveland Plain Dealer reproduces a photograph of a notorious fish hog who lives in Conneaut, and whose other name is E. F. Harrington. The picture shows this fish butcher sitting alongside 7 large muskalonge, which it is said he speared through the ice on Chatauqua lake. The Plain Dealer lauds this brute as a hero. If the reporter had known the contempt which all decent anglers entertain for such men, he would instead have branded him as a disreputable slaughterer. Let us hope that when Harrington reads this he may change his mind as to whether he is a great fisherman or simply a bristleback.

A discouraged fisherman is Richard Trombley, who is locked up in the county jail on the charge of violating the fish laws. Richard has made his living by the fish taken from Lake St. Clair; but now the hand of the law has taken Richard by the collar. He was arraigned before Justice Sellers February 25th. Deputy Game Warden Fred Fisher saw a wagon driven by Trombley stop in the rear of Levy's store. Fred Fisher knew in what business Trombley had been engaged for some time, and he uncovered the wagon, with startling results. In the wagon were 150 pounds of black bass, known out of season as "No. 2 sturgeon." They had been taken by a spear, and Richard was gathered in. In the police court Trombley protested that he had bought the fish. The court set his bail at $300.—Exchange.

Served him right.—EDITOR.

There are violators of the fish and game laws here, some of them prominent men. Many nets are used in this country and it is no uncommon thing for people to go spearing at night on our streams; also on the lakes. Several parties fish the year around for the profit there is in it. One of them tells he makes $1.50 to $2 a day. He gets bass, blue gills and perch. There should be a law to prohibit the sale of fish taken from our small inland lakes.

C. A. Stone, Hillsdale, Mich.

My grandfather owns a place at Bay View, on Little Traverse bay, Mich. One day my brother, Charles, went fishing at the dock. He baited his hook and sat down to fish near the end of the dock where the water was about 19 feet deep. Soon he got a hard bite. He had a good fight and had to play the fish a long time. When he landed it he found it was a bass that weighed 2¼ pounds. Charles is 7 years old.

Horace Benton, Cleveland, Ohio.

This is a good place to hunt foxes. A friend caught 19 last winter; I caught 2 and one black bear. I live on the banks of Pine river, the best trout stream in Michigan. Of course they are rainbows, but some call them brook trout. One was taken that weighed 8½ pounds.

Chas. Garlets, Thorp, Mich.

Will some reader of RECREATION kindly tell me where I can find reasonably good black bass and pickerel fishing within 50 miles of Philadedphia, either in Pennsylvania or New Jersey?

George Parnell, Philadelphia, Pa.

GUNS AND AMMUNITION.

Anybody can keep on shooting all day, but it takes a gentleman to quit when he gets enough.

SEMI-TELESCOPIC SIGHTS.

For a year or 2 past, there has been a remarkable revival of interest in optical aids to the rifleman, for more surely directing rifle shots. The market is now well supplied with rifle telescopes; some good, some indifferent. They are not unreasonably expensive; yet to a large number of users of the rifle, the cost is so much of a bar that they deny themselves the pleasure and comfort a good 'scope can undoubtedly afford. There is, beside the reguler telescope with metallic tubes, a contrivance composed of 2 spherical lenses, 1 for the eyepiece, and 1 for the objective, using no tube or diaphragm. This is denominated the semi-telescopic, or lens sight, and will, when properly constructed, furnish a cheap and useful substitute for a telescope. In various forms they have been in use many years, and there is some question as to who first devised them. In their simplest form, of which we shall here treat, they can be practicably made by any one possessing average mechanical skill.

The lenses can be obtained of any optician or jeweller, and should be cut by him and ground to proper diameter from an ordinary first quality, centered spectacle lens, care being taken that the center of the original lens be also the center of the new lens.

The front lens, the objective, is a plus or convex glass, and is preferably mounted in some form of a hood or globe sight. In the ordinary sight of this kind, the lens may be easily fixed so that it can, at will, be inserted or removed. The cell to contain the lens may be made of brass or hard rubber tubing, or the lens may accurately fit the inside of the hood sight, and be held in by 2 incomplete rings of spring brass, one on each face of the glass. The pinhead or aperture of the front sight remains unaltered, and is used the same as though no lens were employed. It is necessary, if good work is to be done, to have the objective well within the hood, so that the side rays of light may be cut off entirely. It might be mounted on a combination front sight, like the Beach or Lyman, if the lens were protected by a supplementary tube, with the same end in view: cutting out all side light.

The rear lens, the eyepiece, is a minus or concave glass, and should be mounted in the eyecup or aperture of the peep sight, taking care that the optical center of the lens and the center of the aperture in the disc coincide. This lens may be temporarily mounted in sealing wax, used to make it adhere to the rear side of the cup. An excellent method is to have 2 interchangeable cup discs, one with the eyepiece permanently attached, and the other one plain.

The strength of the lenses depends upon 2 factors; the distance between sights and the power required of the completed sight. All users of this device agree that the best results are obtained with the lower powers, nothing higher than 4 powers being permissible, and the best being 2 powers. This latter reduces the apparent distance to the target just ½, with all the consequent advantage.

The principal reasons for keeping the power low are 2. First, the size of field is, owing to construction, necessarily limited, and decreases rapidly as power is increased. Second, the principal use of a rifle thus equipped, being for off-hand work, the power must be low, or the magnification of the errors in holding would be so great that it would be almost impossible to use it in strictly off-hand work. Few men can use a power higher than 4 or 5 diameters in off-hand work, even if equipped with a telescope of high grade, good illumination, and large field.

In using the semi-telescopic sight in target shooting, many who have impaired vision find it the one thing needful to perfect their scores, and to anyone, the regulation bull's-eye at 200 yards is a very different shooting proposition than when viewed with naked, unaided eye. It apparently has increased in size to twice its former dimensions, assuming that your lens sights are 2 power, and you may still use your favorite pinhead or aperture front sights, unimpeded as before.

As I have said, the strength of the lenses depends on 2 factors; the distance between sights, and the power required. Now as to the formula to obtain the proper foci of the lenses. Let d. represent the distance between sights, and p. be the power required. Then d. divided by (p. minus 1) expressed thus $\frac{d}{p-1}$, will be the focal strength of the eyepiece or rear lens, which, of course, is a concave glass. The front lens, the objective, will be a convex glass, equal in power to the focal strength of the eyepiece, multiplied by the power required.

For example, if the distance between sights is 31½ inches, and we desire to construct a 2-power sight, then $\frac{315}{2-1} = 31.5$ (concave), this being the focal strength of the eyepiece. 31.5 multiplied by 2, the power required, = 63. (convex), which is the focal strength of the objective. These focal strengths are expressed in the nearly obsolete, so-called inch system. For convenience these numbers may be transposed into, as nearly as possible, the corresponding strength measured in dioptres. As an aid to ready transposition, we append the following table:

No. of lens in dioptres.	Focal distance in inches.	Nearest corresponding lens in old inch system.
0.12	314.96	
0.25	157.48	144.
0.37	104.99	
0.50	78.74	72.
0.62	62.99	60.
0.75	52.5	48.
0.87	44.99	42.
1.	39.97	36.
1.12	34.99	
1.25	31.5	30.
1.50	26.22	24.
1.75	22.48	
2.	19.69	20.
2.25	17.48	18.
2.50	15.75	16.
2.75	14.31	15 or 14.
3.	13.12	13.
3.25	12.11	12.
3.50	11.25	11.
3.75	10.49	10.
4.	9.84	9.
4.25	9.26	
4.50	8.74	8.
4.75	8.29	
5.	7.87	
5.50	7.16	7.

In transposing the inch measures into dioptres, or the focal distance in inches into either the inch system or the dioptric system, choose that lens which most nearly approximates it, preferably going a little higher, if necessary, rather than lower.

You have now at command the means of making for yourself a serviceable, readily removable lens sight, and can adapt its power to your requirements. At the targets, if you are barred from rest shooting on account of your lens sights, no need for an argument; simply remove the front glass from the hood, and the rear one from the disc to which it is affixed, and without any change in adjustment, your sights are ready for use on even terms with all competitors.

Now for a few "don'ts."

Don't get too high power.

Don't fail to have the lenses centered.

Don't forget that a lens sight won't help you hold your gun well.

Don't expect a well made sight to make a poor gun or imperfect ammunition perform wonders.

Don't forget that the errors in holding are magnified in direct proportion to the power of your sights.

E. B. Guile, M. D., Utica, N. Y.

WHAT THEY THINK OF MARLIN.

I received a little pamphlet entitled the "Original Game Hog," which, no doubt, you have seen. As I do not know to whom I am indebted for this exceedingly valuable contribution to contemporary literature, I can not express to him personally my opinion of it. Great care was evidently taken to suppress all names. Even the printer, the engraver and the artist omitted theirs; while the author is so evidently ashamed of his that he uses a *nom de plume*. I do not blame the printer nor the artist.

As to the alleged "crimes," the only law that governed a sportsman 20 years ago was that game should be either on wing or afoot. Gentlemen who were considered good sportsmen were in the habit of practicing on nighthawks and swallows, or in fact anything that had feathers, and if a person suggested that these creatures did no harm, he was promptly laughed down.

As to the gars and alligators, you probably had and would have to-day the thanks of every fisherman in the vicinity, whether hook and line or net.

D.'s suggestion that you withdraw your book, "Hunting in the Great West," would be equally applicable to the works of Frank Forrester, which, I believe, the A. D. G. H. still offers for sale.

If D. really wants to get down behind someone, why does he not get after some of his fellow subscribers and contributors to the A. D. G. H. about something more recent? Within 3 years ducks and geese have been killed both at the Swan Island Club and the Currituck Club, carried to the club houses, hung on poles, and allowed to rot. These were not fish ducks, but teal, widgeon, sprigs and black ducks, together with Canada geese and whistling swans. The proprietors of Monkey Island Club, Messrs. C. H. Jones and Albert Stone, of Boston, Mass., have, at least, the grace to sell their fowl; but some members of other clubs prefer to let them rot. Whether they learn this trick from the A. D. G. H., or from D. personally I do not know. They all subscribe to one and read the other. To conclude, "A house divided against itself falls," and if D. has game protection really at heart he should be ashamed of his attitude. You are doing a great work, and all advocates of protection should throw aside the past, work unitedly in the present, for the benefit of the future.

A. S. Doane, Waterlily, N. C.

Derby Line, Vt.

Editor Recreation:

Enclosed is copy of a letter I am sending Marlin. E. G. Moulton.

Derby Line, Vt.

The Marlin Fire Arms Co.,
New Haven, Conn.

Dear Sirs: I return your document entitled "The Musings of a Mossback." Probably it is of much more value to you than to me, as I am an admirer of G. O. Shields, his methods, his motives, and his Recreation.

In sending such an article enclosed with your catalogue you have, as an old proverb puts it, "Killed 2 birds with one stone," namely The Marlin Fire Arms Co. and the periodical that published your article. E. G. Moulton.

RELOADING FOR HIGH POWER RIFLES.

Dr. A. W. Smith in his article in November Recreation is a little severe in his denunciation of high power rifles and ammunition. Because one company turns out inferior loads for 25 and 30 caliber rifles, is no reason for condemning that class of weapons.

The Doctor's mistake was in using shells loaded with Laflin & Rand smokeless powder and expecting a velocity of 2,000 feet a second. That velocity can not be obtained with the powder named, on account of the extremely high breech pressure which it produces. In the 25-35 Winchester, 20 grains of L. & R. lightning smokeless, with standard bullet, is the maximum charge, which gives a velocity far below 2,000 feet. The Doctor should not use 30 or 32 grains of L. & R. smokeless in a 30-30 if he values the rifle. The pressure produced would be far above what the gun is intended to withstand. Don't put too much confidence in old instructions for loading L. & R. smokeless powders Write to the manufacturers for their revised directions.

DuPont 30 caliber smokeless with standard bullet gives a velocity of 2,000 feet without excessive breech pressure, and with good accuracy. I am informed the Winchester people load that powder in all shells for high pressure rifles, I have found Winchester loaded 25-35 cartridges all that could be desired. They gave high velocity with excellent accuracy.

For full charges giving a velocity of 2,000 feet, use DuPont 30 caliber powder. For medium loads use L. & R. sporting rifle smokeless, L. & R. lightning smokeless or DuPont smokeless No. 1 or 2, according to the shell and the rifle in which it is to be used. For miniature loads use L. & R. sporting rifle smokeless.

The goods produced by the Ideal Mfg. Co. are the best in the world. Their 110 grain bullet, No. 25730, is not too long for an 11 inch twist. If it keyholes either the rifle is at fault or the bullet is not rightly tempered or lubricated, or too much powder is used. A paper patched 133 grain bullet No. 25731, loaded in a 25-35 shell, with 7 or 8 grains of L. & R. sporting rifle smokeless, gives fine results. It is accurate and shows no sign of keyholing even at long range. It is a splendid medium load. With 10 grains of the same powder it is not accurate and will keyhole at times. With 12 grains of the same powder this bullet is more apt to strike sidewise and 2 feet below or to one side at 100 yards, than it is to go point on and hit the target. I mention the above charges and the results to show that the reason a bullet keyholes is not always because it is too long. I have experimented with various loads for the 25-35 and have obtained fine results, in fact much better than I at first thought possible. For miniature and medium loads I now use paper patched bullets and find them more satisfactory in every way, both at the target and in the woods.

F. C. Moulton, Wallstreet, Col.

HOW I INVENTED THE HAMMERLESS.

My first gun was an old army musket, long, strong and with a kick like a kangaroo's. As I was but 13 and small for my age, the balky old thing used to swat me until my head ached and my trigger finger looked like an over-ripe banana; but when the pain ceased and the swelling subsided I was again willing to spend my last cent for powder and shot and give that vindictive relic another whack at my collar bone. While I was thus industriously inviting disaster a neighbor's boy fell in love with my weapon, convinced from watching its performances that it was a remarkably hard shooter. He offered to trade for it a little single barrel 16 bore and I closed the deal. The little gun was just my size and I was rapidly becoming a wing shot when I unfortunately broke the hammer. I was in despair until I thought of holding the gun in my left hand and exploding the cap with an old harrow tooth. Thus, though unprincipled persons have robbed me of the well deserved emoluments, I am really the inventor of the hammerless shot gun.

One day we had unexpected company to dinner, and mother said,

"Son, call the dog and catch a chicken right quick."

"Lemme shoot it, Ma," I begged.

"All right, son," she replied, "shoot it if you like, but get it here suddenly."

I got my weapon and its accessory hardware, and trudged off in search of potpie filling. I went through the locust grove to a tall thick hedge in the shade of which the chickens loved to scratch and dust themselves. The hedge was thick and the ragweeds tall, and for some time I could not get a shot. At last I caught a glimpse of a pullet I thought would do. Up went the gun, down came the harrow tooth, and while I picked bits of the cap out of my face I could hear the flop-flop-flopping of a dying chicken. I could not see where she had fallen, but running along the hedge to a hog hole I crawled through after my victim. Did I get her? Well, I did; and a big blue hen and ma's pet Leghorn rooster, to boot. I carried as much poultry home as I thought ma wanted; the rest I buried. My appetite for dinner that day was not over sharp.

One evening about a week later mother said, "See here, my boy, have you seen anything of my pet white rooster?"

"No, ma," I answered, "I haint seen him since last week."

Then I slid, unostentatiously, out of the back door.

C. L. Hart, Humeston, Ia.

WANTS TO RETURN TO THE MUZZLE LOADER.

North Park is in Northern Colorado, between Medicine Bow range, and the continental divide, and is about 45 miles long by 30 wide. There are a few bear and elk in the mountains, and deer are quite plentiful in the hills; but the deep snows in early spring drive the deer to the bald ridges of the Park. Then the festive game hog is in his glory, and his pump gun is heard daily within 2 miles of my cabin on Spring creek. One fired 40 shots into a band of deer and got one. Another day 2 others fired about 20 shots and got 2 deer. So it goes on every day. You ask, "Why not invoke the law?" Because the game laws are unconstitutional; therefore they are not enforced against the rich and the game wardens of Colorado do not arrest any but the poor. In consequence game will soon be gone. I am a reader of Recreation, but I do not believe in discriminating between ferrets, bird dogs, deer dogs, and pump guns. By pump guns I mean any magazine gun, rifle or shot. You will not advertise ferrets and certain kinds of fishing tackle, but you advertise dogs and pump guns. Which is most destructive to game, a poor, miserable man with a ferret or the man with a dog and a pump gun? I am a hunter. I detest the name sportsman; it is only a genteel term for a game hog. Any man who will buy a pump gun is a game hog; if he was not, a single shot rifle would do. I have been many years in the mountains and have seen that 99 men out of 100 will not stop shooting until the magazine is empty. You may pass all the game laws you wish, you will never protect game with the pump gun in use. Pass a law that all men going into the woods must carry only a single barrel muzzle loading rifle, and no dog; a man going to hunt birds must carry only a single barrel muzzle loading shot gun, no dog; then game would increase and the woods would soon be cheered by the song of birds and the gambol of wild animals. Men would then become hunters and not sportsmen and butchers; and the little dude with his duck suit and smokeless gun would be no more seen in the land.

John A. Steele, Walden, Colo.

NOTHING LIKE THE SAVAGE.

Replying to A. A. Stott, of Louisville, Ky.: I have owned and used the following high power rifles: Blake, 40-40; Blake, 30-40 army; Mannlicher, 315; Winchester, 30-30 and 30-40, '95 model; and Savage, 303. Have also had the pleasure of handling the Mauser and the Krag-Jorgensen.

I have experimented with the above guns to convince myself as to the best all around sporting rifle. Last fall I purchased a $30 grade Savage to give it a trial on game. It gave such excellent satisfaction, that I sold it to a friend, who was struck with the good qualities of the arm, and I ordered for myself a much higher grade Savage. I have just received it and it is the neatest and best all around gun I can find. I have killed deer with all the above named guns; they are all good, but the Savage is my choice of the lot. The Mannlicher has the greatest range and penetration, but for convenience and economy the Savage takes the lead. Savage ammunition is the best on the market at the lowest price. I consider the Winchester 30-40, '95 model, next to the Savage, and advise all shooters against purchasing bolt action guns for sporting purposes. My advice would be: get a Savage made to fit you, with pistol grip checkered, matted, half-octagon barrel, shot gun butt stock, rubber butt plate and special sights.

I am greatly pleased with the good work of Recreation and the L. A. S., but I think some of the crack shots who contribute articles on shooting have wheels in their heads. As Mr. Mynik says in his letter to the Peters Cartridge Co., some of these 600 yard shots are absurd. Let some of these good marksmen measure off 600 or 800 yards and then put up a deer and look through the sights at it; they will find it like shooting at a fly at 25 steps. I never calculate on shooting at deer over 300 yards. It is better never to shoot unless you are sure of hitting. If this were practiced more there would not be so many wounded deer to escape and die after being lost.

L. R. Baily, Lead, So. Dak.

STILL PRODDING PETERS.

Grand Island, Neb.

Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—I think you do Mr. Shields a great injustice in regard to your ad. RECREATION reaches a class of sportsmen who have used your goods many years. I have shot many thousands of your shells, but I shall discontinue the use of them. The L. A. S. is an organization that should stick together like brothers. When anyone undertakes to down Shields he should have the whole 5,000 or more to jump on. The Marlin Arms Company are sorry they quit Shields, as all members of the League in this locality, and I think everywhere, have quit using Marlin guns. One can hardly give a Marlin away in this country. We are an organization of good fellows, believe in the right thing, and stick up for one another. All I can do to stop the use of your goods in this State I shall do. May the Peters shells lie dusty on the shelves as long as the company bucks RECREATION.

Sincerely yours,
E. C. Statler.

Caldwell, Idaho.

Peters Cartridge Co.,
Cincinnati, Ohio:

Dear Sirs:—I think your house unjust in discontinuing your advertisement in RECREATION. I have used your cartridges and ammunition for years, and have always found them satisfactory. If RECREATION did not publish the faults of guns, ammunition and sporting goods, as well as their good qualities, no true sportsman would want to read it or support it. As a member of the L. A. S., I do not wish to patronize any manufacturer who does not advertise his goods in RECREATION.

Yours respectfully, C. S. Davis.

BEST MEDIUM-PRICED SHOT GUN.

A. C. Burg, Livingston, Mont., asks which is the best medium priced shot gun. I had the Remington people make me what has proved an ideal quail gun for this country. It is their grade A hammerless, sold by most retailers at $35. The barrels are 26 inches; right cylinder, left modified. It is a handsome weapon and good enough for anyone. I targeted it with buckshot over smokeless powder, at 60 steps. It made equally as good a pattern as did a 34 inch barrel that was shot against it. Some dealers say smokeless powder will not shoot buck shot properly, but my experience tells me differently. Should like to hear from others on the subject.

P. H. Willson, Swanton, Va.

I want to tell Mr. Burg that the best medium priced shot gun I have used is the Baker. Am now using a Batavia Leader made by the Baker Co. It is a hammerless with 30-inch barrels, full choked. For trap and duck shooting it can not be beaten. My next gun will be a 7 pound, 28 inch, full choke Baker, for upland shooting. The safety on these guns makes them absolutely safe, which is more than can be said of other makes.

J. B. Hewey, Elkhart, Ind.

A. G. Burg, who wants a medium priced gun, can not do better than to buy a Baker. I have used one a long time and would not part with it. I think the Baker the only safe hammerless; the automatic block safety locking it absolutely until pushed back.

Geo. S. Lang, Rondout, N. Y.

THE REMINGTON LEE.

I rejoice to find the Remington-Lee coming to the front so magnificently. It has long been my favorite rifle in theory, though, in fact, I've never yet seen it. The picture in the Remington catalogue is as near to the weapon as I have ever approached, but that has appealed to what I like to call my good sense. The simplicity of the action is wonderful, and is a strong argument in its favor.

From RECREATION I learn that Frank Hyde, at Sea Girt, carried off honors and money with a Remington-Lee against all comers.

I remember that some writer a few months ago criticised this gun on the ground that while its range was wonderful, its accuracy above reproach and its trajectory admirably low, it yet lacked shocking power and penetration. It seems to me that the force which achieves great range must insure great penetration also. Perhaps I am a poor witness, for I swear by Remington. I have never known a poor weapon to come from the Remington shops. I have always thought the firm so old fashioned as to be honest. Perhaps it is only because they do not know how to put up a poor arm. In either case the brethren get good goods for their money. Whatever bears the Remington stamp is all wool and a yard wide.

W. H. Nelson, Washington, D. C.

SMALL SHOT.

Though I have owned a 30-30 rifle 3 years I can give Dr. A. W. Smith no information as to reloading 30-30 shells, as I invariably use Winchester soft nose ammunition. Have never had a jacket strip or a bullet keyhole that I know of. At target work, of which I do considerable, using an ivory front sight and Lyman's combination rear sight, I can hit an object a foot square nearly every time at 300 or

400 yards. If the doctor will procure some loaded Winchester shells and weigh the powder therein he will find fully 30 grains to the load, with the bullet in proper proportion. If, with this ammunition, results are unsatisfactory, I should be inclined to blame the gun. I have used this same load in other rifles than my Winchester with equal success.

Dr. Fred Sauerbrie, Clarksville, N. Y.

In December Recreation, A. F. Wallace, Milwaukee, Wis., asks how to take lead out of a rifle barrel. It can be removed by plugging one end of the barrel and pouring in a little vinegar. Allow it to remain a few minutes, then wipe dry and the barrel will be as bright as new. Care should be taken to dry the barrel perfectly, or the vinegar may cause it to rust. If A. G. Burg wants a good gun he will make no mistake in buying a Lefever, G or H grade. They are as hard and close shooting weapons as any, besides being extremely simple in construction. In choosing a gun the main thing is to select one with the proper length of stock and correct drop. Then have the barrels bored for the kind of shooting you expect to do. W. S. S., Ganister, Pa.

In reply to D. F. E's. query about Mauser rifles, I can tell him that 2 men here ordered Mauser's from a firm that advertised captured rifles cut down to a sporting model. They look pretty well and shoot hard. The only objectionable feature is the rear sight. It is good of its kind, but so different from the buckhorn that we Westerners will have to get used to it little by little.

Do any Recreation readers know anything about the Mauser pistol? If anyone has one and would like to trade it for skins, undressed, but well cleaned, such as bear, fox, bobcat, or coyote, I should like to hear from him. Or if anyone yearns for antique pottery or arrow heads I should be pleased to correspond.

C. M. Grover, Frisco, N. Mex.

December 27th, 1900, a number of law-abiding citizens, seeing the necessity of protecting game and fish in Fresno county, called a meeting at Fowler, and organized the Fowler gun club, having in view the pleasure and practice of target shooting, as well as the protection of game and fish. The by-laws of the club provide for regular practice shoots every Saturday and Sunday afternoon; also that any members in good standing may hold practice shoots any day, as some members would not shoot on Sunday while others could not shoot on any other day.

Samuel Burnett, Fowler, Cal.

In reply to L. M. Thompson, South Haven, Mich., would say I have made wire cartridges by hand and used them in my old muzzle loader with great success. There used to be a wire cartridge of English make on the market when muzzle loaders were principally used. I doubt, however, whether any dealer, except perchance some of the larger city establishments, handles them now. If Mr. Thompson chooses to communicate with me I can probably furnish him with a few made by hand and suitable for his gun.

Forrest Jones, Glady P. O., W. Va.

I should like to tell J. S. Miller, Jr., that he can not find a better gun for all around shooting than the $80 grade, 16 gauge, Parker. With 28-inch full choked barrels it will kill as far and as surely as any 12. I have used 10, 12, 16 and 20 bores, and at present am trying a 28 gauge, $100 grade Parker. I have not yet given the latter a fair trial. In medium priced guns the $50 Parker and the Ideal Lefever are best. Neither need be over 16 gauge.

Blue Wing, Saratoga Springs, N. Y.

I have used U. M. C. factory loaded ammunition several years, at the trap and in the field, and think it is superior to the W. R. A. make; also to the U. S. and Peters. The Peters shells are condemned for me as they miss fire too often and I know it not to be the fault of the gun, for I use a Baker hammerless, Paragon grade, which is a good shooting gun. The load I like best for the trap is No. 10 smokeless shell and DuPont powder.

V. F. H., St. Edward, Neb.

What Mr. Parshall considers "a fault of the Savage rifle" was more likely the fault of the shooter. Either shot he describes would, if placed where he thinks they were, have been fatal. I know by experience that a Savage will send a bullet clear through a moose, no matter where hit. It is the best sporting rifle made

F. W. Foreshew, Shequiandah, Ont.

Why have the Stevens people taken their ad from Recreation? I am sure they make a mistake in doing so. I wish the Winchester Co. would build a 26 inch barrel, full magazine slide action rifle to use the 25 Stevens cartridge. It would be a good gun for all small game and perhaps, at a pinch, for deer.

Red Cloud, Brooklyn, N. Y.

NATURAL HISTORY.

When a bird or a wild animal is killed, that is the end of it. If photographed, it may still live and its educationē and scientific value is multiplied indefinitely.

MOUNTAIN SHEEP LORE FROM ALASKA.

Dawson, Y. Ter.

Editor RECREATION:

In your valuable RECREATION, of March, 1901, I read an article by Mr. Wm. T. Hornaday on mountain sheep. No doubt Mr. Hornaday studied the subject carefully, but there is a doubt whether or not some of the authorities are correct. Regarding *Ovis montana* and the California sheep, *Ovis nelsoni,* I believe Mr. Hornaday is correct; also regarding the white sheep of Alaska and Canada, *Ovis dalli.* The question is, are *Ovis stonei* and *Ovis fannini* new species?

Would Mr. Hornaday and naturalists in general call a white beaver, a marten with white feet or tail, a black, blue, or fawn colored wolf, a straw colored quail, a white blackbird, or a cow moose with antlers, new species? If these freaks are new species, then by all means call Stone's sheep, *Ovis stonei* and Brown's *Ovis fannini.* If not, call them what they are, *Ovis dalli.*

I have observed that some specimens of *Ovis dalli* are slightly colored, sometimes like the description of *Ovis stonei,* then again like the description of *Ovis fannini.* Besides, there are other variations, too numerous to describe minutely. Some of these variations have the dark markings only on the legs from the knees and hocks down; others have only dark necks; others only dark rumps. Some have white hoofs, some black. If *Ovis stonei* and *Ovis fannini* are new species, the naturalists would better send other men here to name white beavers, white footed martens, various colored wolves, also the different "new species" of sheep. Then we could have *Ovis tomi, Ovis dicki* and *Ovis harryi.*

I have seen pure white sheep with offspring colored and *vice versa.* I will not ask anyone to believe my statement until it is proven, therefore I should like to see someone sent in here who would write of things as they are. Naturalists as well as the public at large could learn a little.

Have you or any of your readers ever seen or heard of a cow moose with antlers? In July, 1900, I shot a cow with antlers, mistaking her for a bull. On going up to her I started her calf which had just finished his lunch of milk. The antlers, of course, were in the velvet and only about 8 inches long. I could not save the head as I was about 400 miles from the Yukon and in very rough country.

Geo. L. Bull.

ANSWER.

When a naturalist describes an animal as a new species he does it solely on the evidence before him, and not on the opinion of any traveler or collector. Every naturalist of standing is so particular about the stability of his work, and so anxious it should stand the test of time, that it would be folly for him to be influenced by the desires of anyone. Dr. J. A. Allen, of the American Museum, described the specimens of mountain sheep collected by Mr. Stone without the slightest reference to the opinions of anyone else. The evidence before him, in 3 mounted specimens, unmistakably indicated a species new to the scientific world. Already a sufficient number of specimens have been collected to supply the great museums of New York, Chicago, and Washington, and they fully sustain the validity of the new species. In this part of the world, there is not the slightest question among scientific men, or any others, as far as I know, regarding the specific rank of *Ovis stonei.* You are the only man of whom or from whom I have heard, who believes that this animal is the same as the white sheep, *Ovis dalli.* If you had ever seen a specimen of Stone's sheep, I am sure you would not hold to your present opinion, for to consider it the same as the white sheep, you would have to doubt the evidence of your senses.

Ovis fannini was described by Mr. Hornaday wholly on the strength of a fine adult speciment which he found in the museum at Victoria. Any naturalist, in his senses, would have described it as a distinct species. Since that specimen was described, other specimens, confirming this species, have been received from Dawson, and are now at the American Museum of Natural History, and the New York Zoological Park.

If it is really true that the white sheep is given to developing all sorts of freaks in color, such as you say you have observed, this fact is important, and should be established by the gathering of specimens exhibiting these variations, and sending them to some scientific institution. If it is true that the white sheep varies its color in the remarkable manner described, you can make an extremely interesting contribution to science by procuring and sending to the New York Zoological Society some pelts, or pieces of skin, which will establish the fact. It may be entirely possible that this animal is given to freakish variations in color, such as are not found in any other hoofed animal in the world. One fact in this connection is of interest and importance; namely, that no such variations as you describe have ever been observed in any other section of the home of the white sheep than around Dawson!

No one claims that all sources of information in regard to *Ovis fannini* have been exhausted. On the contrary, Mr. Hornaday's description of this animal is only the first step in the development of its life history, and all new facts regarding this creature will be of general interest. At present, however, the species seems to be well founded.

While it is quite true that many portions of the Northwest were explored many years ago, by Hudson Bay men, I must remind you that even the white sheep, with its wonderfully wide distribution, remained absolutely unknown to science and the world at large, until discovered by a naturalist of the kind that you seem to despise, in 1884! It makes no difference how many men went through the Stickine country before Mr. A. J. Stone; the fact remains that he was the explorer who discovered a remarkable, and unmistakably new, form of mountain sheep, and brought it out for introduction to the world, by Dr. Allen. Men who go about in strange places with their eyes shut are not explorers, in any sense of the word!

It is now up to you, Mr. Bull, to furnish some proof that the white sheep varies in color as you describe in your letter.

—EDITOR.

GROUSE SOMETIMES DRINK.

In regard to grouse drinking: A full-grown grouse that a friend of mine has in captivity drank, from the first, the same as a hen, only with a quicker movement in securing a mouthful of water before raising the head; but a younger one I secured at one time would only take water as it came down from above, as if the natural idea was to sip from the dew-laden leaves of plants at a level with or above the usual height of the head, or else take both food and water from the old birds, as do the nestlings of the robin or other birds of that class. As the little fellow had to be fed and watered by himself, although in a brooder with brown Leghorn chicks of about the same size and age, which were drinking and picking up food all around him, he was so much trouble that he was taken to the woods near the house, where the mother, that I had watched since she laid her first egg, could raise him in her own way. She was probably glad to receive him, as the 13 she had hatched were reduced to 3 or 4 the first month. The old bird in captivity here takes food and water about as a brown Leghorn hen does, and is enjoying the winter without hustling for himself.

F. S. Morgan, Milton, Vt.

In reply to the query by W. J. W., in March RECREATION, "Do Grouse Drink?" would say I saw a grouse drink at least once in my life. In the fall of 1900 I was hunting grouse and quails in the Southern part of Seneca county, near the postoffice of Lodi, N. Y. I was accompanied by Mr. William Brown, of Seneca Falls, N. Y., and Robert Neely, a farmer of Lodi. We entered a piece of woods and stood on the edge of a ravine which had a stream of water at the bottom. A large, strong grouse flew down the opposite bank, and, alighting at the edge of the running water, proceeded to drink, dipping its bill in the water and raising it skyward alternately until the action had been several times repeated. When Mr. Neely could not stand it any longer he launched his old 10-bore at the bird. I was glad to see it dart away unharmed. I think there is no doubt that the ruffed grouse drinks, as do the rest of its species, which of course include our domestic fowls.

Frederick W. Lester, Seneca Falls, N. Y.

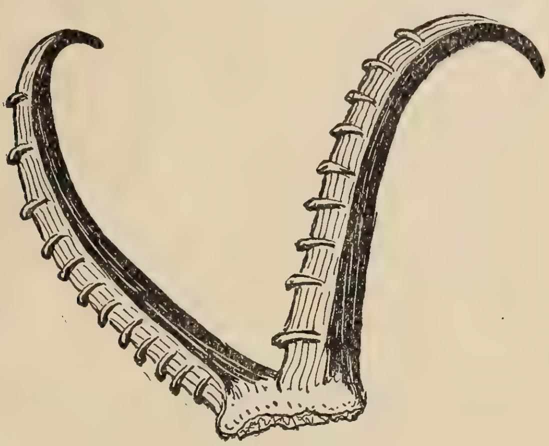
One day in November, 1900, I was quietly walking through a swamp on a corduroy road, when I saw a female ruffed grouse sitting in the middle of the road at the edge of a little pool of water 30 yards distant. I stopped, and she must have seen me, for there was no obstruction to hide me from her view. She gently lowered her head and sipped the water, then raised her head to swallow, precisely as a chicken does. She then paused a moment, drank again, and flew into the timber.

Wm. C. Held, Saginaw, Mich.

DOUBTS AN AMERICAN IBEX.

I notice a drawing in RECREATION of a head with the query, "Is it an ibex?" As I have hunted ibex a great deal, and have secured several good specimens, may I be allowed to express my most emphatic opinion that it is not. Enclosed is a sketch of a pair of ibex horns from the Eastern Soudan. They are about 36 inches in length, curving outward and backward, and do not, to my eyes at least, resemble in the smallest degree those in the drawing you reproduce. The head of an ibex is quite different from that of the animal of the Canadian Rockies, being more massive, shorter, and squarer. An old buck ibex with horns 3 feet long would have a beard at least 6 inches in length.

The picture looks to me that of an antelope. The only point of resemblance to an ibex is the hair on the back. An ibex has a narrow streak of darker coat from head to tail, which, however, does not stand up.



The color of an ibex is a distinct brown, so commonly seen in the domestic goat. I have never seen either an Asiatic or an African ibex that could possibly be called ashy gray.

B. Cotton, Orlando, Fla.

If there were an American ibex it might be entirely different from any of the Asiatic or African types.—Editor.

SQUIRRELS RARELY MOLEST BIRDS.

I was much interested in Inkie's letter in February Recreation. I want to tell you why I killed a few of Inkie's cousins. My home is surrounded by fruit and shade trees, with several butternuts and hickories among them. These trees are the home of numbers of song birds; also of several pine, or red squirrels. The little fellows had become quite tame, and we had become much attached to them, and watched them with pleasure. One day we heard a commotion among the birds and looking in the direction of the noise we saw a number of robins flying around a nest. In the nest sat Mr. Squirrel, in the act of eating an egg. That explained a mystery to me, as we had found several eggs and many bits of eggshells under the trees. To make myself doubly sure that the squirrels robbed the birds' nests I watched them, and saw them at it again; so in justice to the birds I had to end the life of our little squirrels. The pine, or red, squirrel is not protected, yet they are numerous. I should like to know if the larger squirrels rob the nests of birds.

John H. Browne, Penfield, Pa.

The grey squirrels in this city are protected by law and have become abundant and tame. Some citizens question the wisdom of protecting them, claiming that they destroy the nests and eggs of birds. As we have many fine shade trees, birds are probably more useful to us than are the squirrels. Please tell me what you think about it.

D. L. Floore, D.D.S., Columbus, Wis.

ANSWER.

As a rule squirrels do not molest birds at all. Wild animals and birds have personal characteristics just as human beings have. It is possible that some squirrels are vicious enough to disturb birds' nests, but in all my study and observation of the squirrel I have never known a case of that kind. At any rate they are certainly very rare.—Editor.

BREEDING BUFFALOES.

Mr. James Phillips, who owns a large cattle ranch near Fort Pierre, S. D., has about 60 full blood buffaloes in domestication. He has tried crossing these with native cattle, but says the result is not at all desirable or profitable; so Mr. Phillips is confining himself to breeding pure buffaloes. He considers this a good investment, as the robes and heads of mature animals bring good prices. He says he recently sold one head in New York City for $1,000, and that he finds a ready market for good specimens at $500 and over.

Mr. Phillips further says: "I have watched buffaloes under all the conditions of their life, and have discovered many interesting things about them. I used to wonder how the calves could withstand the terrible blizzards which occasionally sweep over our country, but now I know how it is done. When a storm comes the buffaloes form themselves into a triangle, with the bulls along the sides, the boss bull standing at the apex facing the storm. Then the cows range themselves inside the lines of bulls, and in the well protected center the calves and yearlings find their place. The mass is crowded well together into a warm and living whole, and even in the case of the outline of bulls only one side of any animal is presented to the blizzard. The herd will maintain this triangle as long as the storm lasts, and they are able safely to weather a storm that would kill our native cattle. There is something heroic in the stoicism with which the bulls will keep their places no matter how the storm may rage, and anyone who has seen the boss bull doggedly holding his head against a Dakota blizzard as he stands in the apex of the triangle will carry away a lot of admiration for his instinct and sacrifice. If a man wants to get a fine lesson in the advantage of 'standing together' he needs only to watch a buffalo herd in stormy weather."

TAPPING SOUND MADE BY CATFISH.

I notice in March RECREATION a letter from Mr. T. F. Covert, wanting to know what caused a tapping sound under the water.

Some time ago, while on a visit to Iowa, I had an experience similar to that of Mr. Covert. I had gone fishing on Grand river, and was sitting on an old log, which reached almost across the stream. Beside the log was a lot of driftwood, foam, etc. Under this trash I heard a peculiar noise. I decided to investigate; so I sat down to watch. I noticed that whatever made the noise, was moving, as the noise was in different places and occasionally the drift rose half an inch or so. Then the object moved to another place. The water was shallow as the river was low at the time. Finally a small particle of the drift floated loose, and started off, and I saw a channel catfish about 10 inches long make a grab at the drift piece. The water was clear, and I could plainly see the fish. It opened and shut its mouth while making the noise. All at once it darted off into deeper water. The noise sounded, as nearly as I can explain, like tapping on an empty egg shell with a lead pencil. I suppose the fish was feeding.

J. C. Warner, Stockton, Cal.

NATURAL HISTORY NOTES.

In February RECREATION I saw a question which I can partially answer, regarding crows destroying young squirrels. I had a pet crow which was taken from the nest when quite young. It was cared for until full fledged, and then allowed to roam at will about the premises. It had its leg broken, which, for the want of proper care, healed crooked. This bird never grew to be more than 2-3 as large as the ordinary crow. Neither did it ever fly far from the premises unless caught out and driven farther by wild birds, and never on such occasions did it fail to give chase. Notwithstanding its inferior condition, I have known this crow to attack and kill full grown chipmunks, rats and mice.

If this crow in its inferior condition, could do this, would not a full grown wild crow destroy young grey squirrels?

I have also seen a flock of crows flying, one of which dropped the body of a partly grown grey squirrel. I am confident that crows not only can, but do, destroy young squirrels.

Elmer S. Perry, Richwood, Ohio.

There must be some mistake in the illustration of a red-tailed hawk in your January issue; at least it is not the bird we have out here. Our hawk with the red tail has feathered legs and has not sharp shoulders or sharp angles anywhere. This bird lives on prairie squirrels, young rabbits and snakes. In the position in your illustration the tuft of feathers should cover the leg to the toes. J. H. Mackay, Norfolk, Neb.

ANSWER.

The bird you describe and that in RECREATION are both red-tailed hawks. Your bird has a naked tarsus, just the same as the other, but it is partly concealed by the long feathers of the thigh. The only hawks which have the legs really feathered down to the toes are the rough legged hawks, of the genus *Archibuteo,* and they are distinguishable at a glance from the members of the genus to which the red-tail belongs, *Buteo.*—EDITOR.

Mr. Duxbury's gem of information about the mink in RECREATION for March recalled to my mind a pleasing incident of an afternoon spent on Maple river, Michigan. I was casting up stream to the right when my attention was attracted by a mink diving into the water on my left. Resting on the bank and jutting out into the water was a corduroy log about 4 to 6 inches through. About 2 inches were in the water. The mink dived off this log with the current, came up on the other side, crawled upon the log and repeated the performance 6 times as I watched it. Finally it came up with a good sized trout in its mouth, which it carried away up a well defined runway to its home beneath a pile of drift. The little animal was perfectly oblivious to my presence, and nothing could excel the grace and ease of its sinuous motions.

James D .Ermston, Anderson, Indiana.

Will you kindly inform me, through RECREATION, what are the distinguishing markings, color, etc., of the cross, silver grey and black foxes. In fact, anything that will enable me to distinguish them apart, and more particularly between cross and silver grey.

N. W. Jackson, Clayton, Mich.

ANSWER.

The cross, silver grey, and black foxes are merely color phases of the common red species *Vulpes fulvus,* and not infrequently individuals are found which show considerable intergradation between the typical forms. The cross fox usually has a black cross over the shoulders, the pelage of the black fox is uniformly black, and that of the silver grey variety is black with white tips.—EDITOR.

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Tioga,	E. B. Beaumont, Jr.,	Lawrenceville.
“	G. H. Simmons,	Westfield.
Lycoming,	Jas. J. Brennan,	Oval.
“	B. D. Kurtz,	Cammal.
Delaware,	Walter Lusson,	Ardmore
Montgomery,	L. C. Parsons.	Academy.
Bradford,	Geo. B. Loop,	Sayre.
Clarion,	Isaac Keener,	New Bethlehem.
Cameron,	Harry Hemphill,	Emporium.
Clinton,	M. C. Kepler,	Renovo.
Northumberland,	G. W. Roher,	505 Anthracite St., Shamokin.

LOCAL WARDENS IN MICHIGAN.

County.	Name of Warden.	Address.
Ottawa,	W. H. Dunham,	Drenthe.
Kalamazoo,	C. E. Miller,	Augusta.
Berrien,	W. A. Palmer,	Buchanan.
Cass.	Thomas Dewey.	Dowagiac.
Hillsdale,	C. A. Stone,	Hillsdale.

LOCAL WARDENS IN VIRGINIA.

Mecklenburg,	J. H. Ogburn,	South Hill.
King William	N. H. Montague,	Palls.
Smythe,	J. M. Hughes,	Chatham Hill.
King & Queen,	R. D. Bates,	Newtown.
Louisa,	J. P. Harris,	Applegrove.
Henrico,	W. J. Lynham,	412 W. Marshall Richmond.
East Rockingham,	E.J.Carickhoff,	Harrisonburg.

LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	S. N. Leek, F. L. Peterson,	Jackson.
Carbon,	Kirk Dyer,	Medicine Bow.
Laramie,	Martin Breither.	Cheyenne.

LOCAL WARDENS IN TENNESSEE.

Sumner,	W. G. Harris,	Gallatin
Stewart,	John H. Lory,	Bear Spring.
Robertson,	C. C. Bell,	Springfield.
Montgomery,	P. W. Humphrey,	Clarksville.

LOCAL WARDENS IN NEBRASKA.

Hall,	E. C. Statler,	Grand Island

LOCAL WARDENS IN NEW HAMPSHIRE.

Cheschire,	S. C. Ellis,	Keene.
Sullivan,	G. A. Blake,	Lempster.
“	J. W. Davidson,	Charlestown.

LOCAL WARDENS IN VERMONT.

Rutland,	Wm. J. Liddle,.	Box 281, Fair Haven
Windsor,	F. A. Tarbell	West Bridgewater.
Orleans,	E. G. Muloton,	Derby Line
Essex,	H. S. Lund,	Granby.

LOCAL WARDENS IN ILLINOIS.

Rock Island,	D. M. Slottard,	12th ave and 17th St.. Moline.
Iroquois,	J. L. Peacock,	Sheldon.

LOCAL WARDENS IN OKLAHOMA.

Kiowa and Comanche Nation,	A. C. Cooper.	Ft. Sill.

LOCAL WARDENS IN IOWA.

Clinton,	D. L. Pascol,	Grand Mound.
Pattawattamie,	Dr. C. Engel,	Crescent.

LOCAL WARDENS IN WASHINGTON.

Okanogan,	James West,	Methow.
Stevens Co.,	Jacob Martin,	Newport.

LOCAL WARDENS IN UTAH.

Washington,	S. C. Goddard,	New Harmony.

LOCAL CHAPTERS.

Albert Lea, Minn.,	H. A. Morgan,	Rear Warden
Angelica, N. Y.,	C. A. Lathrop,	“
Augusta, Mont.,	H. Sherman,	“
Austin, Pa.,	W. S. Warner,	“
Boston, Mass.,	Capt. W. I. Stone,	“
Buffalo, N. Y.,	H. C. Gardiner,	“
Cammal, Pa.,	B. A. Ovenshire.	“
Charlestown, N. H.,	W. M. Buswell,	“
Cheyenne, Wyo.,	J. Hennessy.	“
Cincinnati, Ohio,	B. W. Morris,	“
Coudersport, Pa.,	I. L. Murphy,	“
Cresco, Iowa.,	J, L. Platt,	“
Davis, W. Va.,	J. Heltzen,	“
Dowagiac, Mich.,	W. F. Hoyt,	“
East Mauch Chunk, Pa.,	E. F. Pry,	“
Evansville, Ind.,	F. M. Gilbert,	“
Fontanet, Ind.,	W. H. Perry,	“
Ft. Wayne, Ind.,	W. L. Waltemarth	“
Great Falls, Mont.,	J. M. Gaunt,	“
Heron Lake, Minn.,	K. C. Buckeye,	“
Hopkinsville, Ky.,	Hunter Wood,	“
Indianapolis, Ind.,	Joseph E. Bell,	“
Jerome, Ariz.,	Dr. L. A. Hawkins,	“
Johnsonburg, Pa.,	W. J. Stebbins,	“
Kalispell, Mont.,	John Eakright,	“
Keene, N. H.,	F. P. Beedle,	“
Kingfisher, Okla.,	A. C. Ambrose,	“
Lake Co., Ind.,	Dr. R. C. Mackey,	Rear Warden.
Loganpsort, Ind.,	E. B. McConnell,	“
Ludington, Mich.,	G. R. Cartier,	“
Mechanicsburg, Pa.,	Dr. J H. Swartz.	“
Minturn, Colo.,	A. B. Walter,	“
New Albany, Ind.,	Dr. J. F. Weathers,	“
New Bethlehem, Pa.,	Isaac Keener,	“
Penn Yan, N. Y.,	Dr. H. R. Phillips,	“
Princeton, Ind.,	H. A. Yeager,	“
Reynoldsville, Pa.,	C. F. Hoffman,	“
Rochester, N. Y.,	C. H. McChesney	“
St. Paul, Minn.,	O. T. Denny,	“
St. Thomas, Ont.,	L. J. Hall,	“
Schenectady, N. Y.,	J. W. Furnside,	“
Seattle, Wash.,	M. Kelly,	“
Syracuse, N. Y.,	C. C. Truesdell,	“
Terre Haute, Ind.,	C. F. Thiede,	“
The Dalles, Ore.,	C. B. Cushing,	“
Walden, N. Y.,	J. R. Hays,	“
Wichita, Kas.,	Gerald Volk,	“
Winona, Minn.,	C. M. Morse,	“

DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

Syracuse Arms Co., Syracuse, N. Y. Guns.
Davenport Fire Arms Co., Norwich, Conn. Shot guns, rifles.
Gundlach Optical Co., Rochester, N. Y. Photographic goods.
Blair Camera Co., Rochester, N.Y. Photographic goods.
The Bostwick Gun and Sporting Goods Co., 1528 Arapahoe St., Denver, Col.
James Acheson, Talbot St., St. Thomas Ontario, Sporting goods.
Jespersen & Hines, 10 Park Place, New York City.

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A. F. Rice, 155 Pennington avenue, Passaic, N. J.
Dr. W. A. Valentine, 5 W. 35th street, New York City.
A. A. Anderson, 6 E. 38th street, New York City.
A. V. Fraser, 478 Greenwich street, New York City.
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J. H. Seymour, 35 Wall street, New York City.
A. G. Nesbitt, Maple street, Kingston, Pa.
D. C. Beard, 204 Amity street, Flushing, L. I.
C. H. Ferry, 1720 Old Colony Bldg., Chicago, Ill.
Hon. Levi P. Morton, 681 5th avenue, New York City.
H. Williams, P. B. 156, Butte, Mont.
D. B. Fearing, Newport, R. I.
E. H. Dickinson, Moosehead Lake, Me.
Lorenzo Blackstone, Norwich, Conn.
A. L. Prescott, 90 W. Broadway, New York City.
G. S. Edgell, 192 Broadway, New York City.
W. B. Mershon, Saginaw, Mich.
Hon. H. W. Carey, East Lake, Mich.
George Carnegie, Fernandina, Fla.
Andrew Carnegie, 2nd, Fernandina, Fla.
Morris Carnegie, Fernandina, Fla.
W. L. Underwood, 52 Fulton street, Boston, Mass.
C. E. Butler, Jerome, Ariz.
Mansfield Ferry, 183 Lincoln Park, Boulevard, Chicago, Ill.
Austin Corbin, 192 Broadway, New York City.
J. Stanford Brown, 241 South 5th street, Reading, Pa.

There are thousands of men in the United States who should be life members. Why don't they join? Will someone please take a club and wake them up?

STAY IN THE FIGHT.

Savannah, Ga.

Editor Recreation:

I am in receipt of a letter dated March 1st, asking my aid in behalf of the Hon. John F. Lacey's bill to protect the game of Alaska. While I am still a friend of the birds and game of America, I am not for the last 2 years a member of the League. Nevertheless I shall write my Congressman and the 2 Senators from this State and request their favorable action on the measure when it shall come up.

You will recall that at one time I was a hard worker for the establishment of a chapter of the League in this State, but after more than a year of unsuccessful and disheartening labor, I gave up the project, and concluded that the task of civilizing the game hogs in this vicinity was a hopeless undertaking. Since that time I have done nothing toward protecting our feathery tribe and wild game.

During a residence in New Mexico, where there are strict laws for the protection of game, I saw on more than one occasion deer and antelope sold in the beef markets contrary to the law, and the authorities evidently winked at the violation. I have concluded that, in view of open violations where stringent game laws exist, there is little use in establishing laws for the protection of game anywhere if the officers of the law will not enforce them without fear or favor. In this country, where I am again living, we now have some excellent laws for the protection of game, but there is no attempt on the part of the officers of the law to enforce them.

If I were a man of wealth and leisure I could keep myself busy prosecuting game law violators, and nothing would give me more pleasure than to be able to keep hot on their trails. As it is, I am thoroughly disgusted and have decided that there is no other way than to let the game hogs and pot hunters kill out all the game; which they will have succeeded in doing in the next 5 years, unless the game hogs and pot hunters should themselves be providentially killed out at an early date.

James S. Estill.

On receipt of the foregoing letter I wrote Mr. Estill as follows:

Did you ever know a reform movement of any kind that was successful from the start? I do not know your sentiments on the question of temperance, but whatever they may be, you will, doubtless, approve at least some good things which temperance people have accomplished. You are aware that in the middle ages it was an almost universal custom of good people in both city and country throughout England, Scotland and Ireland, to get drunk every afternoon or night, and then to boast of it. Eventually a certain class of thinking people decided that this habit was shameful and degrading. They went to work to create a public sentiment against it. It took them 50 years to get the masses of the people to thinking their way. And to-day to see a drunken man is the exception in England as in America. The bibulous habit which prevailed in England at the time I speak of took strong root here, though it never became quite so general. To-day the masses of people in all walks of life condemn the man who gets drunk and makes an exhibition of himself. Suppose that after a year of hard work these temperance reformers had become disgusted and quit. The English people would still have been a nation of drunkards, and probably the Americans would, too.

Suppose that after a year of hard work all the pioneers in the organization of this League had become disgusted and quit. The slaughter of game would have gone on just as it was going on up to '98; but we have kept at work, and shall keep at it as long as we live. The results are already noticeable in many places. If you have been reading Recreation you have noticed every month many reports of convictions of violators of game or fish laws in various States. If I had room to print all these reports that come to me you would realize that many thousands of men are convicted every year of law breaking and compelled to pay fines or serve out their sentences in jail. The League has been directly responsible for convictions of 853 men in its 4 years of work. Our members have contributed evidence and assistance that have resulted in the conviction of probably 3,000 other law breakers. Do you realize what it means to have a man convicted of such an offence in a small town? Well I do. I frequently hear from certain localities where we prosecuted a man 2 or 3 years ago, that neither that man nor any of his neighbors has dared to fire a gun in close season from that day to this, and that as a consequence of our work in such places game is increasing. In other cases where we have convicted one man who sold game in violation of law I am informed that from that day to this not a piece of game has been sold or offered for sale in that town or in any of the surrounding towns. Can you realize what this means in the matter of protecting game in the aggregate? I started in to advocate the enactment and enforcement of game laws 30 years ago. Suppose I had grown disgusted and quit at the end of the first year. There would have been no League to-day and no Recreation magazine. I kept at it and shall keep at it as long as my strength will permit me. The result is that to-day the League has 8,000 members and RECREATION has an actual paid circulation of 65,000 copies a month. It is safe to assume that each copy is read by 5 people. That means 325,000 readers each month. I have heard from probably 100,000 of these people to the effect that they have been completely reformed by its teachings; that while they were formerly game butchers they are now temperate, up-to-date sportsmen and gentlemen. Read in April and May RECREATION reports of the annual meeting of the League, held in February last. Then tell me whether, in your judgment, it has paid for the friends of game protection to stick at it; or whether it would have been better for all to have done as you have done—get disgusted at the end of a year and quit because they could not reform the world in that length of time.

GOOD WORK IN PENNSYLVANIA.

Hollidaysburg, Pa.

Editor RECREATION:

Two years ago I joined the L. A. S. and at once began active work in this place and vicinity to save the game, as little or no attention was then paid to the game laws. I tried to get all our sportsmen into the League. I was not successful, but that did not discourage me. I kept on working. I persuaded my bosom friend and hunting companion, Mr. William Gardner, to become a member of the League, and we have been working ever since to protect the game here.

Last fall Mr. Dan Duncan, a well known sportsman, joined the League. We 3 members got down to work in earnest a few weeks before the opening of the shooting season, as large numbers of squirrels were migrating to this section of the country and were being killed by the pot hunters. A number of League posters were procured and we posted them throughout the game sections of Blair county. We spent all our spare time traveling through the woods and fields putting up these notices, some of which were torn down, but were replaced by us with new ones. These notices stirred up the whole county, and caused the majority of the illegal hunters to stop their nefarious work immediately. One place along the foot of Brush mountain was inhabited by a large colony of grey squirrels. That section was posted thoroughly. When a hunter went that way he saw the warning pieces of muslin staring him in the face in all directions and hastily passed on. We saved nearly all these squirrels, as a good farmer friend of ours told us he did not hear a gun fired after the place was posted. Posters were sent to places where we could not go ourselves and were put up by friends.

Our next step was to collect a fund to pay special officers to ferret out the violators of the game laws. We circulated a subscription paper for this purpose among the sportsmen and secured a goodly sum. The constables under the new laws are required to act as game and fire wardens and have the authority to arrest without a warrant; also to search any person they suspect of having game. The services of 4 constables were secured and we agreed to pay them $2 a day for every day they went out, whether they were successful or not. They knew that for every successful prosecution they would receive $10 reward from the State and one-half the fines. They were, therefore, anxious to go. If they did not catch anyone they would still get the $2, which would pay them for their trouble. They scoured the county thoroughly and searched several suspected persons but found no game. One officer chased two men with guns for about an hour over the mountains but could not catch them. All this caused much excitement and although no arrests were made the desired effect was attained. Little or no hunting was done until the opening of the season Oct. 15th.

We asked the judge of the county to advise the constables to perform their duties as ex-officio game and fire wardens; and he did so in open court when the constables assembled to make their returns.

A farmer in the Eastern part of the county, last September made complaint against a man by the name of Estep, whom he charged with shooting a turkey out of season. The constable arrested the wrong man, a brother of Estep. The case was dismissed and the guilty man has not yet been arrested.

A few days after the season closed last month we were informed that wild turkeys were being killed from blinds in the Loop, a section of mountainous country where turkeys always gather in the winter, as they can find plenty of feed there and are well protected from the storms; this Loop being a long basin, hemmed in by high mountains. We set to work at once to gain all the information possible, and asked Constable James Stanley, one of the officers whom we had hired earlier in the fall, to give the matter his attention. He went to work at once. With our assistance he discovered the names of the men who were killing the turkeys and secured a number of excellent witnesses, some of whom had seen the pot hunters at the blinds, and others who had seen them shoot birds. The constable made information the against the offenders last Monday and each gave bail to the amount of $300 for his appearance at a hearing, which was held Saturday afternoon. I was unable to be present but Mr. Gardner was there and gave valuable aid. He will write you shortly and give you a complete description of the hearing. Both sides were represented by counsel and the case was appealed to court. The Squire's office was thronged with interested spectators, and as the case is the first of the kind here, it has stirred up much interest. If it is taken to court, the League should cooperate with us to win it, as it is of the utmost importance that we do so

Harry P. Hays.

REPORT OF NEW JERSEY DIVISION.

During the past year I have caused printed posters of the League to be put up in all available conspicuous places, and have had several hundred circulars printed and distributed as far as finances would permit. I have destroyed several set lines, etc., during the year, but could get no evidence for conviction. I have failed to convict several corporations for polluting the rivers. This has cost much money, and the State also failed.

Local Warden D. Hunt, of Wauaque, in company with 2 other wardens, caused the arrest of 2 people for Sunday gunning. One was fined $20 and costs and the other got 90 days in the county jail.

REPORT OF C. M. HAWKINS, LOCAL AND STATE WARDEN.

Frank Ditale, killing robin, $20 and costs.

Michael Lyons, spearing fish, $20 and costs.

Geo. Clark, dog running at large, $20 and costs.

Wm. Baldwin, dog running at large, $20 and costs.

American Copper Co., polluting Rahway river, $100 and costs.

REPORT OF LOCAL WARDEN MITCHELL.

Lyman Carter, killing grey squirrel, $20 and costs.

Several of the local wardens have not rendered any report.

Our laws for the protection of game are in many instances bad. Woodcock shooting is allowed in July and October, and everything is killed before the open season. I have been fighting against a bill in our present Legislature which allows the use of nets during November and December for catching suckers. Anyone knows that all kinds of fish must suffer. It is one of the worst laws that could be on statute. I am informed on good authority that this bill has now passed the house and is signed by our Governor. God help our game fishes as well, for a warden can not stand by every haul. Our Fish and Game Commission recommended a change in our laws forbidding the sale of game at all times, and a gun license; but we all foresee the doom of these bills when our honorable body passes such a rotten law as to allow netting at any time. It will undo what our Commission has so nobly done the few last years in restocking at great expense. I shall see to it, personally, that our sloughs, etc., in my section are driven so full of stakes during the fall that it will be an utter impossibility to draw a net, and shall so advise all my local wardens, as well as the public generally by circulars, etc. The swine are already planning in the country stores their slaughter for the coming season. I have done all in my power for the enforcement of our laws. Vice-Warden Colfax has done some good service in analyzing waters, etc., and aiding me generally.

A. W. Van Saun, Chief Warden.

LEAGUE NOTES.

The Blair county branch of the League of American Sportsmen scored a victory at the office of Justice C. G. Lowry, when John Wertz, Warren Wertz and William Robinson, 3 Frankstown farmers, recently convicted of violating the game law, appeared, and through their attorney withdrew their appeals from the judgment recorded against them and submitted to the sentence of the court. John Wertz and Warren Wertz were committed to jail, the former to serve 75 days and the latter 50 days. William Robinson paid his fine and costs, aggregating $56.68. The case against Al Campbell will probably be discontinued upon payment of costs by defendant. To the clever detective work of Constable James Stanley and Patrick Burke, special officers of the League, is due the successful enforcement of this sharp lesson to the poachers of the county that the League is in earnest in its crusade against them. The fortunate officers will have the division of rewards aggregating about $75—Hollidaysburg (Pa.) Register.

Thus you see the League is still doing things. It will keep on until all pot hunters and poachers are convinced that it does not pay to break the law.—EDITOR.

I have lately secured through personal effort the conviction of the following 8 men for selling quails and prairie chickens:

William Waterman, Cooper, Iowa, fine, $35.

Richard Waterman, Cooper, Iowa, fine, $35.

Jed Hunter, Cooper, Iowa, fine, $25.

Harry Town, Cooper, Iowa, fine, $65.

Charles Hepty, Cooper, Iowa, fine $105.

Ed. Searle, Jamaca, Iowa, costs.

James Andrews, Jefferson, Iowa, fine $25.

Walter Lockwood, Herndon, Iowa, fine, $65.

These men are all from a neighborhood that has been notorious for violations of the law. I think I have them cured.

S. C. Quinby, Chief Warden,
Des Moines, Iowa.

FORESTRY.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford of the same institution.

It takes thirty years to grow a tree and thirty minutes to cut it down and destroy it.

THE MANZANITA

The common manzanita of California is a magnificent evergreen shrub, usually 8 to 15 feet high, with highly polished mahogany colored branches and berries. It is an exceedingly common shrub throughout the region, generally occupying wide areas on dry, barren ridges, often to the entire exclusion of other vegetation, and in masses so thick that they are impenetrable to man. The ways in which the plant is used for food or medicine by Californian Indians are discussed by Dr. V. K. Chestnut in a recent bulletin of the Department of Agriculture.

"The fruit is not much more than 1-3 inch in diameter, but the quantity produced is large. It was used extensively by the Indians when the Spanish priests first settled the country. From the priests it received the name 'manzanita,' which means 'little apple,' and was suggested by the shape of the fruit. This name has been universally adopted as the common, as well as the botanical, specific name of the shrub. The generic name, *Arctostaphglos,* is deriver from 2 Greek words meaning 'bear' and 'grapes.' Bears are exceedingly fond of the fruit, and it is in manzanita patches that they are hunted during the summer and autumn. The ripe fruit is dry, mealy, and nutritious. Its time of ripening used to be memorialized by the Concows and other tribes by holding a special dance and a 'big eat.' The green fruit is tart and so indigestible that it is likely to cause colic, but when eaten in small quantity it is of great value in quenching thirst, an item of importance, because the shrubs often grow on dry and barren hillsides. During July and August, when the berries are ripe, a number of squaws go out into the hills with their babies and their huge carrying baskets and beat off large quantities of the berries. These are caught in the baskets and carried home, where they are eaten raw or cooked, converted into cider, or stored away for winter. During the gathering, which may last a considerable time, the babies are protected from thirst by wrapping them in the soft, flexible green leaves of the mountain iris.

"The Yoki Indians recognized the fact that the bushes do not all yield equally well. On that account certain large and prolific bushes, and even large areas, were owned by a family or a tribe, and only after the rightful owner's demand was satisfied could the fruit be picked by others. Tribute was often exacted for permission to gather food materials from such property.

"Manzanita berries are eaten in great quantity, but some tribes, especially the Numlakis, use them as a powder, like *pinole,* or cooked in hot ashes and made into bread or mush. Death is said to occur from eating the fruit too freely. The bowels become stopped with great masses of seeds and pulp and death follows, with contraction of the pupils and general tetanic spasms, such as are observed with strychnine poisoning or in the symptoms of cerebro-spinal meningitis.

"The method of making manzanita cider as practiced by one of the more civilized Concow women is worthy of note, for from personal experience the beverage can be recommended as delicious. The ripe berries, carefully selected to exclude those that are wormeaten, are scalded a few minutes, or until the seeds are soft, when the whole is crushed with an ordinary potato masher. To a quart of this pulp an equal quantity of water is added. The mass is then poured immediately over some dry pine needles or straw contained in a shallow sieve basket, and the cider is allowed to drain into a water-tight basket placed beneath, or sometimes it is allowed to stand an hour or so and then strained. After cooling, the cider is ready for use without the addition of sugar. It is delightfully spicy and acid in taste. From information obtained, it seems probable that some of the Indians not only ferment the cider to obtain vinegar, but also to obtain an alcoholic beverage. The Yoki name for the cider is *ko-och-ok.*

"A better quality of cider is said to be made from the pulp alone. The berries are ground up in a 'pounding basket' and the seed fragments separated by means of a flat, circular basket about a foot in diameter. Some of the ground material is placed on this, and it is then thrown repeatedly into the air, falling on the mat when it is in an inclined position. The fine flour will cling to the meshes, while the heavier seed parts will roll off on the ground.

"The Calpella Indians make a tea of the leaves to cure severe colds, but they are commonly regarded as too strong for internal use. In this connection it is interesting to note that the leaves of a closely related species have recently been manufactured into an extract for the cure of catarrh of the throat and stomach. The Little Lake Indians boil the leaves till the extract is yellowish red and then use it as a cleansing wash for the body and head; in the latter case to stop some kinds of headache. The leaves are also used by them, and by many white people of the country, to check diarrhœa. An analysis of the dry leaves, made by W. H. Rees, of the University of California, shows that they contain about 8 per cent. of tannin.

"The old Concow women chew the leaves into a thick cud and place the mass on sores for the healing effect. The younger people grind up the leaves with water before applying. This pulp is also used for sore backs on horses.

"Bees gather large quantities of honey from the flowers from January to March, and children are fond of sucking or eating the globular, waxy flowers."

NUT GROWING.

Almost everyone who owns a farm, or even a city lot, plants fruit trees and greatly enjoys cultivating and watching them grow; but few people plant nut bearing trees. Some who have planted them have been disappointed, as some nut trees, like chestnuts, are difficult to grow in certain soils. Other people have been disappointed because of nuts failing to germinate when carefully planted in suitable soil. Nuts permitted to dry, even for a few days, are not at all likely to grow. All nuts and acorns intended for planting should be stratified in earth or sand as soon as out of their hulls, and never permitted to become dry. At one time I bought nuts from the largest dealer in tree seeds in America, and after planting with great care I failed to get a single nut to germinate. Again I got nuts of the same variety direct from the hulls, cared for them up to planting time and succeeded in germinating over 90 per cent of all planted. If nuts at time of hulling are mixed with sand or ordinary garden soil, neither too wet nor too drv, and placed in a cool cellar, or buried in a well drained spot in open ground until planting time, few will fail.

Ten years ago I planted a pecan nut sent me by a friend in Missouri. The tree, now about 30 feet high, is shapely and greatly admired by all who see it. It bore sparingly in 1900, but quite freely the last year; and the quality of the nuts is of the highest, there being no trace of the not unusual, but unpleasant, pig nut flavor. The tree withstood a temperature of 38° below zero without injury to a single twig. Because of the quality of the nuts and beauty and rarity of the tree I prize it highly.

Japan walnut trees are desirable for planting, being hardy, of rapid growth and bearing nuts early in life.

Some interesting results have been obtained by hybridizing the different walnuts; and without doubt timber and nut trees of great value will be obtained as progeny of these, and from further hybridizing. A large and enticing field is here open to anyone who will carefully cultivate it. Mr. Burbank, the greatest hybridizer of the age, if not of any age, has created some remarkable trees in hybrid walnuts. Of one of these, which he named Paradox, he writes: "Paradox surpasses all others in rapidity of growth and size of foliage. Trees 6 years of age are fully twice as large, broad and tall, as black walnuts at 10, or Persian walnuts at 20 years of age. Ten to 12 feet growth a year is not unusual. The leaves, often 2 feet to a full yard in length, are clean cut, glossy, bright green, and have a surpassingly sweet odor, resembling that of fragrant apples, and as powerful and peculiar as that of roses or lilies. The bark is thin, smooth, light gray, with markings of white. The wood is compact, with lustrous, silky grain, taking a beautiful polish; and as the annual layers of growth are often an inch or more in thickness, and the medulary rays prominent, the effect is unique."

This may seem like fulsome praise, but it is well known among horticulturists that Mr. Burbank under rather than over states the value of his productions. How can any tree lover resist the temptation to plant such trees?

Another of his hybrids he named Royal, and worthy it is of its name. It is as hardy as the black walnut, while the quality of the nuts is superior and they are of the largest size. Meats are large, part readily from the shell, and have none of the strong, disagreeable flavor of the black walnut. While the Paradox is a shy bearer, the Royal bears abundantly at an early age. Royals on my own grounds have made a growth of 46 inches within 6 months of planting the nut, and are erect, shapely trees, with little or no pruning. If you wish a nut tree that will excite the admiration of every tree lover, plant a Royal.

The Persian, or so-called English, walnut is worthy the attention of nut growers of the North as well as the South, for nuts and trees are now to be had that are hardy in Northern Ohio and New York.

E. P. Robinson, Sidney, Ohio.

PURE AND IMPURE FOODS.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

SOME FACTS ABOUT HONEY.

Honey, as everyone knows, is a thick, sweet liquid of more or less pronounced flavor, produced by bees of various kinds and by other insects. The neuter or working bees gather the nectar from the nectaries of flowers, and other sweet substances if flowers are lacking, extracting it by means of the proboscis and passing it into the crop or honey bag. The bee disgorges the honey into the cells of the comb. Apparently the sweet substance undergoes some change in the honey bag, as honey differs in flavor from the nectar of the flowers from which it is gathered. The consistency of honey varies with age and is influenced by its source, that from some flowers being much thicker than that from others. The flavor also varies with the source from which it is gathered, that from clover, sweet clover, basswood, or linden flowers, for instance, being agreeable, while that from buckwheat is strong and less generally liked. Age also affects the flavor. Some honey which at first has a weedy taste loses this on keeping.

Honey has on an average the following percentage composition: Water, 18.2; protein, 0.4; carbohydrates, 81.2, and ash, 0.2. The carbohydrates are made up of dextrose and laevulose in about equal proportion. Honey contains some aromatic bodies which give it flavor, and sometimes a little wax. The best and newest honey is clear and contained in a white comb. Older honey is of a yellowish tone and sometimes darker. On standing, dextrose sometimes crystallizes out from the liquid honey, rendering it opaque or often thick. The composition of honey varies somewhat according to the food of the bees, their age, season, etc. Hyblas, a mountain in Sicily, and Hymettus, a mountain in Attica, were in ancient times celebrated for their honey, doubtless in consequence of the wild thyme and other fragrant herbs growing on them. Since earliest times man has appropriated the honey gathered by wild bees and bees of different kinds that have been raised in hives to produce it in quantities under favorable conditions. It is a favorite article of diet owing to its sweet taste and agreeable flavor. The actual food value depends on the carbohydrates present. Like all other carbohydrate foods, it is a source of energy in the body. Honey has a fairly high fuel value, on an average 1520 calories a pound. It is, however, generally eaten for its flavor rather than for its food value. Honey is most commonly eaten as relish, with bread and other foods. In Europe it is generally served with rolls and coffee for breakfast. Many Americans use honey as they do syrup, with hot bread or cakes. Before sugar was as plentiful as it is today, honey was used for sweetening foods, and some cakes are made at the present day, especially in Germany and Switzerland, in which it is so used. Candy is sometimes made from honey. It is said that it is always used for making the genuine nougat. Doubtless little of the confectionery which is sold under that name contains honey.

To the ancients who were unacquainted with sugar, honey was of more importance than it now is. "A land flowing with milk and honey" offered the highest conceivable advantages to the Eastern mind. Taken in moderate quantity, honey is wholesome and laxative, but persons suffering from digestive disorders often find that it aggravates their symptoms; and there are persons in health who, owing to some idiosyncrasy, can not eat honey without distress. Its therapeutic action is probably not great, but it is frequently employed in mixtures prescribed for allaying coughs and in various agreeable cooling drinks used in febrile and inflammatory affections.

It should be mentioned that honey occasionally possesses poisonous properties, due to the flowers from which it was gathered. The poisonous honey of Trabizond is gathered from *Azalea pontica.* In America, poisoning has occurred from eating honey gathered from laurel, *Kalmia latifolia* and *Kalmia augustifolia.* Many other instances of poisonous honey are on record.

Honey is marketed in the comb and also extracted from it. The latter, sometimes called "strained" honey, is frequently adulterated with commercial glucose. It is stated that much of the so-called honey which is sold contains none of the product gathered by the bee, and is entirely artificial. Of 68 samples of honey recently examined by the Massachusetts State Board of Health, 15 were adulterated with cane sugar or commercial glucose, or both. One sample contained as high as 88 per cent. of commercial glucose.

PACKING ORANGES IN SPAIN.

"In no instance are the oranges in Spanish groves plucked," says a recent writer, "but with a short pair of clippers, resembling wire-cutting pliers, they are slipped from the stem, 3 or 4 oranges being received by the left hand at a time. Before placing the oranges in the basket, the portion of stem remaining on the fruit is cut close; boys with baskets slung from their shoulders being employed to climb for the fruit beyond the reach of the men. When 20 or 30 baskets are filled, the cart comes along and carries them off to the packing houses; the first layer of baskets being placed in a swinging shelf underneath the cart, the second on the bottom, and the third on a layer of boards forming an upper tier, so that little or no pressure is put on the oranges. Mules and horses are utilized for reaching portions of the orchard inaccessible to carts. They carry about 6 or 8 baskets on wooden crates slung across the backs of the animals, and on arrival at the packing house the fruit is emptied on the floor to the depth of not more than 12 to 18 inches; sand and straw being frequently distributed to receive it. A typical packing house, in Spain, has a floor space of about 70 by 120 feet, to evade the necessity for shelves in laying out the fruit; the shelf system being deprecated by the packers as causing unnecessary handling of the fruit, and being less accessible to the sorter. There are no sizing machines in use, as they save nothing in time and labor. Each orange is individually culled, with or without them; but the Spanish women are experts at this business.

"The buildings are divided into 4 departments, namely, sorting, wrapping, box making and packing. The sorting is the most important portion of the work, and is generally accomplished by elderly women of long experience. The oranges are so assorted that damaged or imperfect fruit, or fruit with a blemish, such as a wormhole or a depression from contact with a branch while growing, or fruit which for any other reason the sorters may consider unfit for shipment, may be laid aside. Under this head 20 per cent. of the harvest is rejected, and finds its way to local markets. Much care and study have been bestowed on the classification of the oranges; for we find that they are packed into boxes of some 7 different sizes.

"Between the sorters and the packers are the wrappers, sitting in groups around heaps of the fruit, each heap of a certain class, supplied by the men who take them from the sorters. Here again the oranges are subject to further inspection, and blemished fruit which may have escaped the scrutiny of the sorters is thrown aside. No oranges are shipped from Spain which do not bear on each end of the case a stencilled trademark, or brand, of the packer; also number of oranges contained in the box. The brand also indicates whether the fruit is of good quality, or finest or superior quality. The wrapper has a pile of cut papers in her lap, and, dextrously placing an orange at one end, she rolls it from her, gathering the ends in a tight twist at each side, which holds the paper in place prettily and perfectly. An ordinary hand can do 20 to 25 a minute. The wrapping paper is of a fine, soft, silky quality, made in Spain. The cost there for enough to wrap an average of 240 boxes is 80 pesetas, or about $10, according to rate of exchange; stamping, 20 pesetas, or nearly $5. The wrapped fruit is then carried to that portion of the house where the oranges are packed in their respective boxes according to size and class.

"The packing is done by girls, 2 of them putting up a box of 714 in 15 minutes and a box of 420 in 10 minutes. When the box of oranges is packed ready for the lid, it appears much too full, the top layer being nearly half their thickness above the level of the box edge.

"When the carpenter has finished nailing on the cover, small boys come along with strips of rawhide and nail them around each end in place of hoops. Finally the box is handed over to men who dextrously and firmly bind each round and round with some 10 or 12 yards of cord plaited from esparto grass. The boxes are then carried to the *grao*, or beach, where they are loaded on surf boats and conveyed to the steamers lying at anchor in the roads some half a mile away."

WATER IN BUTTER.

The average quantity of water contained in American butter has been calculated as about 12 per cent. The quantity of this constituent, however, is variable, depending on a number of conditions, some of which have been recently investigated.

In a study of the effect of salt on the water content of butter, chemical analyses showed that the salted and unsalted butter, in lots worked once, contained respectively 12.74 and 15.12 per cent. of water. In lots worked twice, the salted butter contained 10.53, and the unsalted butter 14.33 per cent. of water. The unsalted butter always had a dry appearance, but in every comparison it was found to contain more water than the salted butter. In this case it made a difference of about 3 per cent in the water content of the butter.

The effect of the size of the butter granules on the quantity of water in butter was also studied. About 300 pounds of ripened cream was divided into 2 lots, one of which was churned in a box churn until the butter granules were about the size of clover seed, while the other lot was churned in a combined churn and worker until the butter granules were about the size of corn grains. Both lots were salted and worked to the same extent, except that one was worked on a table worker and the other in the combined churn and worker. Eleven trials of this kind were made. The average water content of the butter churned to large granules was 13.89 per cent., and of the butter churned to small granules 12.15 per cent.

In other experiments the temperature of the butter during working was also taken into account. In each of a number of comparative tests cream was ripened, cooled, and divided into 2 equal lots, both of which were churned under uniform conditions, and were otherwise treated alike except that one lot was washed with cold water and the other with comparatively warm water. In 3 of the comparisons, where the granules were of the same size, an average difference of about 25 F. in the temperature of the wash water made a difference of about 2½ per cent. in the water content of the butter. The softer butter, resulting from the use of the warmer water in washing, contained, in every case, the most water. In one of the tests, washing coarse granular butter with water at 45 degrees was compared with washing fine granular butter with water at 70 degrees. The percentage of water in the butter made in the 2 ways was, respectively 14.07 and 17.50 per cent.

These experiments show that the presence of salt, the size of the butter granules, and the hardness of the butter are factors exerting an influence on the quantity of water in the butter. Where a dry butter is desired, as for export, these principles may have considerable practical importance. By churning cream at a low temperature and continuing the churning until the granules were as large as peas, washing for about 30 minutes with water at 45 to 48 degrees, and working twice, butter was secured containing as low as 6.72 per cent. of water. Of 32 analyses of samples of butter made in this way, 7 showed less than 8 per cent. of water, 7 from 8 to 10 per cent., and 10 from 10 to 12 per cent. It is not, however, advised by the experimenters that export butter should be made with less than 9 to 10 per cent. of water.

THE OLDEST BREAD IN THE WORLD.

The Egyptians placed their mummies in carefully constructed tombs to await the return of the soul, and often surrounded them with jewels, flowers, food, and other articles which it was believed the soul would need in the spirit world, or on its return to earth. When the tombs are opened by modern explorers the jewels are bright and the delicate and fragile flowers are often marvelously well preserved, seemingly no older than the blossoms sometimes found pressed in an old book. The fruits which have been found in Egyptian tombs, though discolored, have more or less of their well known form, and are easily recognizable as sorts which are grown at present. The bread made in old Egypt and seen in the museums today does not appear appetizing. It is dark in color, and looks as if it had been charred. It seems hardly possible that anyone could tell from what grain the flour used in making it was ground, or whether it was leavened with yeast, or made from only flour and water. However, some Egyptian bread made 4,000 years ago was recently discovered by an explorer, and found its way to the laboratory of a German scientist. Upon examination under a microscope it was evident that the bread was made from ground barley. This could be readily known, since the flour ground from each sort of grain has distinguishing characteristics. The barley cake had been leavened with yeast, for the yeast cells were plainly visible. The yeast was not of choice quality, and the bread must have had a sour taste, since the remains of other bacteria similar to yeast plants were also found, one being very like the microscopic plant which produces butyric acid. The starch of the flour, when baked so long ago, had been largely gelatinized. However, a small quantity of material was found which gave a marked blue color when treated with iodine. This was undoubtedly starch, for it is well known that nothing else will give this characteristic color reaction. The bread thus contained some unchanged starch; and though the quantity was small, it was just as truly food as any starch we might buy today. The minute starch grains, too small to be studied except with a microscope, had remained unchanged while empires passed away, and the baker, and the king who ruled over him, had been alike forgotten. The dark color of the bread when found is possibly due to slow oxidation; that is, the oxygen of the air slowly burns the material and it becomes charred as it would if more quickly burned by fire.

It is, perhaps, hardly necessary to say that the yeast plants seen were dead cells, no longer capable of reproduction. Life in all its forms seems limited in duration. The dormant seed or the minute reproductive body of the yeast plant dies after a time, just as surely as a larger tree.

The statement is often met with that grain found in ancient tombs has sprouted and borne fruit. It is almost certain that such tales are untrue, for no such results have been obtained when the tests were made by scientific methods and all chances of fraud excluded.

BOOK NOTICES.

ANIMALS OF THE PAST.

Ordinarily, the literature of extinct animals is about as lively as Jurassic reptiles *in situ;* but the book by Mr. Frederick A. Lucas, of the U. S. National Museum, is a bright and shining exception. It tells the reader precisely what he most wishes to know, and secondly, it is written in a bright, breezy and cheerful style. Heretofore nearly every scientist save the late Dr. Coues, has written in the orthodox style of funereal and polysyllabic solemnity; easy to write, but confoundedly hard to read. Mr. Lucas boldly writes as he talks, and the result is delightful.

The reader is made acquainted with the mammoth and the mastodon, the giant dinosaurus, 40 feet long, the awe-compelling triceratops of the Middle West, the toothed birds and the ancestors of the horse. All these and many more are introduced to the reader so effectively that a permanent acquaintance with each is quickly established. To quite an extent "Animals of the Past" is a handy guide to an acquaintance with the marvellous extinct animals of North America, of which so many have been discovered during the last 20 years and all of which are yet practically unknown to the great majority of people. People who live in Wyoming, Nebraska and Montana, in particular, will be deeply interested in the descriptions and figures of the wonderful and mysterious creatures which once inhabited those States, and whose fossil remains now fill the halls of our finest museums.

The whole book is commendably free from technical terms, and commendably filled with pertinent and useful facts clearly stated. As a book for space fillers it will prove a perfect Godsend, and inasmuch as it is certain to strike 12, it will presently be imitated without limit. Let us hope it is the forerunner of a more lively and readable style in scientific literature.

Animals of the Past, by Frederic A. Lucas, Curator of Comparative Anatomy, U. S. National Museum, 8 vo., cloth, pp. xx-258, 41 ills. New York: McClure, Phillips & Co. Price, $2 net.

A story of the present West is "The Captain of the Gray-Horse Troop," by Hamlin Garland, with the scene laid chiefly in an army fort on an Indian reservation. Its motive is Mr. Garland's own deep interest in the Indians and his earnest desire that the remnant of these peoples may be saved from extinction, not by forcing them into a life unnatural to them, but by permitting them to retain as many of their native customs as possible, and by training them to be self-supporting along the line of their inherited aptitudes. In Captain Curtis, the hero, whom the Indians know and love as Swift Eagle, Mr. Garland has portrayed the man who goes straight to the mark, strong in his faith in himself and in the righteousness of his work. A beautiful young artist, painting pictures of the Indians at the Fort, furnishes color and romance. With the mountains, the plains, the garrison life, the dress and customs of the Indians, Elsie Brisbane's beauty and the uprising of the white settlers against the Indians, the story is exceedingly picturesque, and gives Mr. Garland much opportunity to dedepict the scenes he loves best. Harper & Bros., New York, publishers.

To read "Next to the Ground," by Martha M. Williams, is to spend dreamy, happy, care-free days out of doors, on an old Tennessee plantation, where every animal is an individual, every tree and bird and blossom, important. Mrs. Williams' style is charmingly simple and joyously free from theories. She tells the story of the fields, the woods, the birds, the night, the snow, the hunting, and everything that makes the daily interest of those who work in the soil and live simple, natural, country lives. These "Chronicles of a Countryside" are full of the light of the sky, the quiver of leaves, the calls of the speechless ones, the flutter of wings, sweet smells of wet earth and the sound of the huntsman's horn. Mrs. Williams has a keen sense of humor, which reveals itself deliciously in her point of view toward the tricks and whims of the familiar domestic animals, as well as the wild things; and the record of these country days shows matchless observation.

Published by McClure Phillips & Co., New York.

Mr. Burt Jones, 855 Beacon Street, Boston, Mass., has collected a large number of photographs of live moose. Most of these pictures were made in the woods of Maine and Canada, and show the moose in almost every possible position or form of action. These pictures must prove of inestimable value to artists, taxidermists and nature students in general. The pictures are strung together by stories of moose hunting and observations on the habits of the animal, and the whole batch is published in a neat and tasteful book of 144 pages. It sells at $2. If interested send for a copy.

PUBLISHER'S NOTES.

NEW STYLES OF KODAKS.

The Eastman Kodak Company has issued a new catalogue that fairly sparkles with jewels of photographic science. The Eastman Company has added several new cameras to its already extensive line, and to see pictures and read descriptions of some of these, makes one long to get outdoors and make pictures. One of the new features is a No. O folding pocket Kodak, a miniature picture machine, which is scarcely larger than a cigar case, but which makes a picture 1⅝ by 2½ inches. This is not only a pocket Kodak, but might reasonably be termed a vest pocket edition. You can readily carry it in the inside pocket of your coat, and no one would know to look at you that you were loaded. If you make a sharp negative with one of these cameras you can make enlargements from it to 5 or 6 times the original size, that will have all the good qualities of the original contact print.

Another recent production of the Eastman factory is a No. 3 folding pocket Kodak *de luxe*. This superb instrument is the same construction as the original No. 3, but is equipped with a Bausch & Lomb plastigmat lens and a Bausch & Lomb automatic shutter. The box is covered with Persian morocco, which has a beautiful natural pattern in soft brown tints, and the bellows are covered with brown silk. On each instrument is a solid silver name plate, and the whole business is enclosed in a hand-sewed carrying case of Persian morocco, with silver trimmings. This instrument sells at $75, but it is worth that simply to look at and to play with, if you should never make a picture with it. It is one of those artistic, fascinating bits of mechanism that one can revel in for a whole evening, and it will interest any visitor who may come in, no matter if he be a camera crank or not. Then when you do have occasion to go photographing, this camera, if shown at the door, would admit you to any brownstone front on Madison Avenue.

The Eastman people also describe and illustrate in this new catalogue a stereo Kodak, a No. 2 Brownie, and a plate attachment for a No. 3 folding pocket Kodak; also a new folding head tripod.

The Eastman people are now furnishing the famous Bausch & Lomb plastigmat lenses on any and all their cameras, when so ordered, and the man who can not make good pictures with such an equipment as this company can furnish, may as well quit trying and shut up shop.

Nowhere in America can be found more glorious opportunities for fishing and hunting than in Northern Maine. Moosehead lake is a beautiful sheet of water, with 400 miles of shore line. There is to be found the best trout and togue fishing in this North country. Canoe trips in the different waters of this famous region are exceedingly popular, and the enthusiastic fisherman who has heretofore canoed on the calm surface of a placid lake will realize the difference when running the rapids of some of those mighty rivers which cover hundreds of miles of waterway.

The Guide Book of the Bangor & Aroostook Railway, "In Pine Tree Jungles," gives full information regarding this region. Sportsmen and pleasure seekers should not fail to write the Railway Company for a copy of this book before deciding where to spend their summer or fall vacation. Please say you saw the book mentioned in RECREATION.

Yawman & Erbe, Rochester, N. Y., makers of the famous Automatic reels, have offered 3 separate prizes, of $25 each, to lucky anglers who may see fit to compete for them this season. One of these prizes is to go to the man who takes the largest trout during the season of 1902, on a Y. & E. Automatic reel. The second prize goes to the man taking the largest black bass with a Y. & E. reel, during 1902. These people also offer a prize of $25 for the largest fish of any other kind taken with a Y. & E. reel during the year.

I should like to see RECREATION readers win these prizes. Write Yayman & Erbe for contestant's blank, and please say you saw the competition mentioned in RECREATION.

W. J. Reynolds, general manager of the Racine Boat Manufacturing Company, writes me that nothwithstanding they have increased their capacity 25 per cent. this year, they are already behind their orders, and will not be able to come anywhere near filling them promptly throughout the season. The Racine people have been advertising in RECREATION 3 years, using full pages all the time, and this is why they have more orders than they can fill.

Our January business was 2½ times that of January 1901, February was 6 times that of February, 1901, and on the 3d of March we had already passed the total for March 1901. This shows that as the people learn of the merits of Pneumatic goods they are quick to appreciate and buy them.

Pneumatic Mattress & Cushion Co.,
2 South St., New York City.

EDITOR'S CORNER.

A DISASTROUS LAW.

The New York Legislature has passed a law which permits game dealers to store game, under bond, and keep it through the close season. Every worker in the cause of game protection knows what this means. We all know that the average game dealer would just as soon swear to a lie as to the truth. I had one of them up in court 3 weeks ago, charged with having sold quails to 2 of my employees, on February 28th and March 1st of this year. My witnesses swore positively that they bought the game of this man; that they were absolutely certain as to his identity, and I produced the birds in court. In the face of all this testimony, the dealer deliberately swore he had not sold nor had a quail or a game bird of any kind in his store since December 31st, 1901; and this man is only one of his class.

I had a restaurant dealer arrested 2 years ago for selling and serving quails to myself and several friends. We took portions of the birds with us from the table, in each case, produced them in court, identified them ourselves as the remains of the birds we brought, and had them identified as quails by W. T. Hornaday. Then the accused restaurant dealer took the stand and swore he had not had in his possession, or served, a quail on his tables since the close of the season. He put 2 of his waiters on the stand, who swore they had not served any quails and had never known of any being served in that restaurant during close season, though they had worked there several years.

The police justice believed these men were lying, and held the accused to the criminal court. When the case was called there the dealer walked up to the bar, pleaded guilty and paid his fine. This is the kind of stuff New York game law violators are made of and this is the kind of men the new law is made for.

Under this cold storage law a game dealer may place in a cold storage house a barrel, said to contain 5 dozen quails, which may contain 50 dozen. He can take out 45 dozen in close season and sell them. At the opening of the next legal season for selling he can call in a State warden, open the barrel, show him the 5 dozen quails therein, and have his bond canceled. Dealers will devise many other ways of beating this law, just as they have been beating every law that has been enacted for the protection of game in the last 20 years.

This bill was evidently framed and passed primarily for the purpose of saving the Arctic Freezing Company from a certain disastrous penalty to which it subjected itself. It will be remembered that Game Warden Overton, of Long Island, went into this company's cold storage plant last spring, with a search warrant and seized about 55,000 pieces of game, held there illegally. The officers of the company were arrested, taken to court, gave bail and were released. Then Governor Odell appointed Black, Olcott, Gruber & Bonynge, attorneys for the State, to prosecute this company. I wrote the Governor and these attorneys several times, to know what was being done in the matter, and urging that the case be vigorously prosecuted. Some of these letters remain unanswered to this day. Others were answered to the effect that the case would come up and would be pushed in due time. Now, a law has been enacted to authorize just such traffic in game as these people were conducting, and it is a well known fact that no court or jury can ever be induced to convict a man for an offence committed under a law that has meantime been repealed.

So the grand work of Game Warden Overton goes for naught: and the Arctic Freezing Company, and the 50 or more dealers who owned the game placed in its charge and held illegally, will go free, instead of having to pay into the State treasury some hundreds of thousands of dollars, as they should have been compelled to do.

Governor Odell recommended in his annual message last fall that a law should be enacted that would allow the placing of game in cold storage, at the close of the legal season for selling. Senate bill 151 was evidently prepared under his supervision. It was fathered and pushed through both houses of the Legislature by the Governor and the State Fish and Game Commission, of which Lieutenant Governor Woodruff is president. This is the kind of men we have at Albany to protect New York fish and game.

There is another view to be taken of this whole subject of game traffic in New York. That is, that practically every pound of game that comes into this market, aside from water fowl, is stolen from the people of other States. All the States of the Union have laws prohibiting the shipment of game out of their limits, except Virginia, Kentucky, Mississippi, Louisiana and Montana. The first 4 of these States may possibly contribute a few quails and a few woodcock to the New York market; but not 5 per cent. of the quantity consumed here. New York itself does not produce any ruffed grouse, woodcock or quails for the market; so that practically all these birds that are sold in New York are sent here from States that have laws prohibiting the export of game.

What about the tons of prairie chickens sold in New York? Not one of these birds can be legally shipped into this State, from any State in the Union where they exist. Consequently the game dealers of New York are carrying on a wholesale system of stealing from the people of neighboring States. Now the law-making power of the Empire State steps in and says to the game dealers, "We will protect you in holding your swag during the 10 months of the year when it would not be wise to offer it openly for sale." The Governor of New York originated this measure, and the Fish and Game Commission of New York pushed it through the Legislature.

What do the sportsmen of this State think of their Governor and of their Fish and Game Commission?

LODGE OF ELKS IN TROUBLE.

Certain members of the San Francisco Lodge of Elks have got themselves into a cold box. They asked the park commissioners for permission to kill one of the big bull elk in the Golden Gate park in order that they might hang its head in their lodge room as a trophy. After due consideration the park commissioners granted the request, and Mr. Ward, a member of the lodge, asked permission to kill the elk. This was also granted, and Mr. Ward marched valiantly up to the paddock in which the elk are enclosed, leveled his rifle at one of the big bulls and shot him down. Then he and Mr. Kohn, another member of the lodge, stood up behind the carcass of the fallen animal and had themselves photographed.

At this juncture Mr. A. T. Vogelsang, executive officer of the State Board of Fish and Game Commissioners, stepped in, seized the elk and placed it in cold storage. At last accounts he was planning legal proceedings against Mr. Ward for killing the elk. The killing was in direct violation of the State law which prohibits the killing of elk in California at any time or under any circumstances, and it is likely Mr. Ward will wish, before he gets through with this case, that he had not been so fresh.

It is high time the Order of Elks should change its method. The badge, or at least one of the badges, of this order is an elk tooth. As elk become more and more scarce in the country, the members of this order are offering higher and higher prices for elk teeth, thus stimulating the unprincipled market hunters of the West to pursue this noble animal and slaughter him wherever and whenever found.

The Colorado Springs Lodge of Elks passed a resolution some years ago condemning the wearing of elk teeth. This resolution was printed in the form of a circular, and sent to all the other lodges in the United States, but it seems to have had little effect. All the lodges of this excellent order should follow the example of the Colorado Springs Lodge, and renounce the wearing of elk teeth and the buying of elk heads to hang in lodge rooms.

Executive Agent Vogelsang is entitled to the gratitude of every sportsman and every naturalist in the United States for his prompt and valiant action in the case above recited, and it is earnestly hoped he may succeed in making Mr. Ward pay a heavy fine for his cold blooded slaughter of this noble animal. If the park commissioners of San Francisco had more elk than they needed in their park they could no doubt have sold some of them to other cities. If not, they could have given them away. There are plenty of cities and private individuals throughout the country always ready to take any surplus wild animals that may be held in domestication and provide proper homes for them. Mr. Vogelsang is a hero and should have a monument.

I printed in March RECREATION a report from a Chicago paper to the effect that the game market of that city had been practically destroyed by the enactment and enforcement of the non-export laws of all the Western States. There are but 5 States in the Union that have not enacted such laws. These are Virginia, Kentucky, Mississippi, Louisiana and Montana. As everyone knows, it is impossible for these States to furnish even one-tenth of the game that is handled and consumed in New York City alone. If, therefore, statesmen throughout the other States will take proper measures to see that their non-export laws are stringently enforced, the game market of New York City can be destroyed even as that of Chicago has been. Not only that, but the markets of Cincinnati, St. Louis, Philadelphia and Boston can be broken up. Why should not all sportsmen in the other 44 States get on the firing line and do their duty?

The Chicago Inter-Ocean reports that Jacob Beck, a farmer living near Aurora, Ill., recently saw a wolf near his barn. He went for his gun, but the wolf took to the woods. Then the farmer rang up several of his neighbors, asking them to turn out. They did so, and after an exciting chase the wolf, or at least a wolf, was killed. This is a new use for the telephone. We may next expect to hear of telephone lines being run into the forests of Maine, Canada, and into the big game regions of the mountains. Then the luxury hunter can go into camp, make himself comfortable, provide a supply of reading matter and send his guide into the woods to locate his game. When an elk or a moose or a bear is found the guide can skip to the nearest telephone station, ring up his boss at camp, and tell him to come out and kill the game. Verily the 20th century is a hummer.

Governor Nash of Ohio has set a pace that the governors of all other States of the Union having any game to protect would do well to follow. He has reorganized his State Fish and Game Commission by accepting the resignation of 3 members thereof who knew little about game birds, animals or fishes, and who, therefore, cared little whether these creatures are protected or exterminated. Governor Nash has appointed in place of these men 3 practical sportsmen, who are supposed to be deeply interested in the cause of game and fish preservation. We may reasonably expect that there will be something doing in Ohio from this time forward in the way of looking after the interests of sportsmen.

The Hon. Alvin Evans, member of Congress from the 19th district of Pennsylvania, whose first term in Congress will expire in the near future, will probably be a candidate for reelection, and it should be a pleasure for every sportsman in his district to vote for him regardless of political lines. He is a member of the League, a firm friend of the cause of game protection and always votes on the right side of every measure that appears in Congress looking to the better protection of game in any part of the country. When we find a man of this character in any lawmaking body we should see to it that he is kept there as long as he wishes to stay.

Frank Burton, of West Sebois, Maine, killed a cow moose last fall and is now serving a 3 month's sentence in jail as a consequence. When Warden Pollard arrested him Burton threatened to kill any man who might testify against him, but fortunately some of his neighbors were found who knew the circumstances and who had nerve enough to go into court and tell the truth, notwithstanding his threat. When Burton's term of imprisonment expires he should be put under heavy bonds to keep the peace or should be compelled to leave the State.

Mr. Charles Schubert, manager of Hotel Interlaken, on Beaver lake, Wisconsin, was arrested in February last on a charge of hunting rabbits with a ferret and was fined $20. It would be cheaper for Schubert when he finds a rabbit burrow in future to sit down near it, wait until the rabbit comes out, sprinkle some salt on its tail, and catch it in his hands. He may not get so many rabbits in a day, but he would have more money at the end of the week.

Augustus Violette was convicted of the killing of a cow moose at Grand Falls, N. B., in November last and fined $100. In default of payment he was sent to jail, where he probably had to live on bread and water with an occasional lump of corned beef or pork. Hereafter Gus will probably obey the laws and thus be able to feed at his own trough, even if he doesn't have moose meat at all seasons of the year.

The Hon. J. P. Elkin, Attorney General of the State of Pennsylvania, is a candidate for the office of governor. He is a League member and a firm friend of game protection. If elected to the higher position he would undoubtedly look well to the enforcement of game laws. RECREATION, therefore, bespeaks for him the support of all Pennsylvania sportsmen regardless of party lines.

Charles Payne, the wild animal man of Wichita, Kan., has a new way of shipping wild ducks. His brother Frank has become a breeder and flyer of homing pigeons; and some of his birds have been doing remarkbly long distance flying. The plan is this: He makes little string halters, hitches a lot of ducks to a pair of homers, and starts em out. The pigeons forthwith lead the ducks home.

I am almost daily in receipt of inquiries as to where live quails can be had for restocking. If any of the readers of RECREATION, living in States which do not prohibit the export of quails, know where, in such States, live birds can be bought, I should be glad to have names and addresses.

About a year ago a friend sent me a story of a kingfisher that made its winter home near his house and fished in a neighboring brook, perching on the telegraph wire between shots. I have forgotten the name of he writer. Will he kindly write me?

"Lyons!" shouted the trainman of the N. Y. C. express.

"Heavens!" exclaimed the unsophisticated Englishman, to his companion, "and neither of us has any guns."

Ask your Doctor

about the good of beer.

He will confirm what we tell you—

That barley-malt is a half-digested food, as good as food can be.

That hops are an excellent tonic.

That the little alchohol in beer—only 3½%—is an aid to digestion.

That he prescribes beer for the weak.

But Purity is Essential

But he will tell you that beer, being a saccharine product, must be protected from germs, and must be brewed in absolute cleanliness.

That it should be cooled in filtered air.

That the beer itself should be filtered.

And, as an extreme precaution, every bottle should be sterilized.

He'll say, too, that age is important, for age brings perfect fermentation. Without it, beer ferments on the stomach, causing biliousness.

When he tells you that, he has practically prescribed Schlitz.

Schlitz beer is brewed with all these precautions. It is the recognized standard all the world over, because of its purity.

Ask for the brewery bottling.

Schlitz

THE BEER THAT MADE MILWAUKEE FAMOUS

This
Revolutionizes
Photography

The Magazine of the *Snappa* Makes it the Marvel Camera of the Age

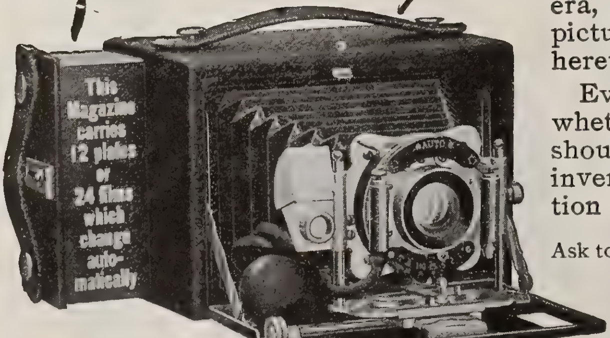
Snappa Camera is the most recent development of photographic science. An instrument so compact and complete; so efficient in every use; so marvelous in its mechanical perfection as to entirely revolutionize the making of pictures.

Snappa magazine carries 12 plates or 24 films, which change automatically with a motion of the hand. You always have a fresh plate or film ready for instant use.

It is impossible to make two exposures on one plate; you can develop each exposure separately and to the best advantage—the only way to make perfect pictures.

Snappa camera is not only the fastest camera, but it is also the most accurate, taking pictures with a rapidity and precision heretofore unknown in snap shot work.

Everybody should know all about it—whether you have a camera or not—you should know the advantages of this great invention. It is a revelation—an education in the possibilities of photography.


This Magazine carries 12 plates or 24 films which change automatically
AUTO

Ask to see it at the dealers, or send for descriptive book.

ROCHESTER OPTICAL & CAMERA CO.
119 South Street, Rochester, New York

AMATEUR PHOTOGRAPHY.

"For sport the lens is better than the gun."

I wish to make this department of the utmost use to amateurs. I shall, therefore, be glad to answer any questions and to print any items sent me by practical amateurs relating to their experience in photography.

7th ANNUAL COMPETITION.

Recreation has conducted 6 amateur photographic competitions, all of which have been eminently successful. The 7th opened April 1st, 1902, and will close November 30th, 1902.

Following is a list of prizes to be awarded:

First prize: A Long Focus Korona Camera 5 x 7, made by the Gundlach Optical Co., Rochester, N. Y., fitted with a Turner-Reich Anastigmat Lens, and listed at $85.

Second prize: A No. 3 Folding Pocket Kodak, made by the Eastman Kodak Co., Rochester, N. Y., fitted with a Bausch & Lomb Lens Plastigmat Unicum Shutter, and listed at $61.50.

Third prize: An Al-Vista-Panoramic Camera, made by the Multiscope and Film Co., Burlington, Wis., and listed at $40.

Fourth prize: A Wizard C Camera, 4 x 5, made by the Manhattan Optical Co., Cresskill, N. J., with B. & L. Iris Diaphragm and Leather Carrying Case; listed at $33.

Fifth prize: A Waterproof Wall Tent, 12 x 16, made by D. T. Abercrombie & Co., New York, and Listed at $32.

Sixth prize: A Gold Hunting Case Watch; listed at $50.

Seventh prize: A Tourist Hawkeye Camera, 4 x 5, and made by the Blair Camera Co., Rochester, N. Y., and listed at $15.

Eighth prize: A Bristol Steel Fishing Rod, made by the Horton Mfg. Co., Bristol Conn., and listed at $6.

The 10 next best pictures will each be awarded one dozen 8 x 10 Carbutt Plates, made by the Carbutt Dry Plate Co., Wayne Junction, Philadelphia, Pa.

The 10 next best pictures will each be awarded one dozen 5 x 7 Carbutt Plates.

The 10 next best pictures will each be awarded one dozen 4 x 5 Carbutt Plates.

A special prize: A Goerz Binocular Field Glass, listed at $74.25, will be given for the best picture of a live wild animal.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or animals, representing in a truthful manner shooting, fishing, amateur photography, bicycling, sailing or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of Recreation. Negatives not to be sent unless called for.

In submitting pictures, please write simply your full name and address on the back of each, and number such prints as you may send, 1, 2, 3, etc. Then in a letter addressed Photographic Editor, Recreation, say, for instance;

No. 1 is entitled —— ——.
Made with a —— —— camera.
—— —— lens.
On a —— —— plate.
Printed on —— —— paper.
Length of exposure, —— ——.

Then add any further information you may deem of interest to the judges, or to other amateur photographers. Same as to Nos. 2, 3, etc.

This is necessary in order to save postage. In all cases where more than the name and address of the sender and serial number of picture are written on the back of prints I am required to pay letter postage here. I have paid as high as $2.50 on a single package of a dozen pictures, in addition to that prepaid by the sender, on account of too much writing on the prints.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

PRINTING AT NIGHT.

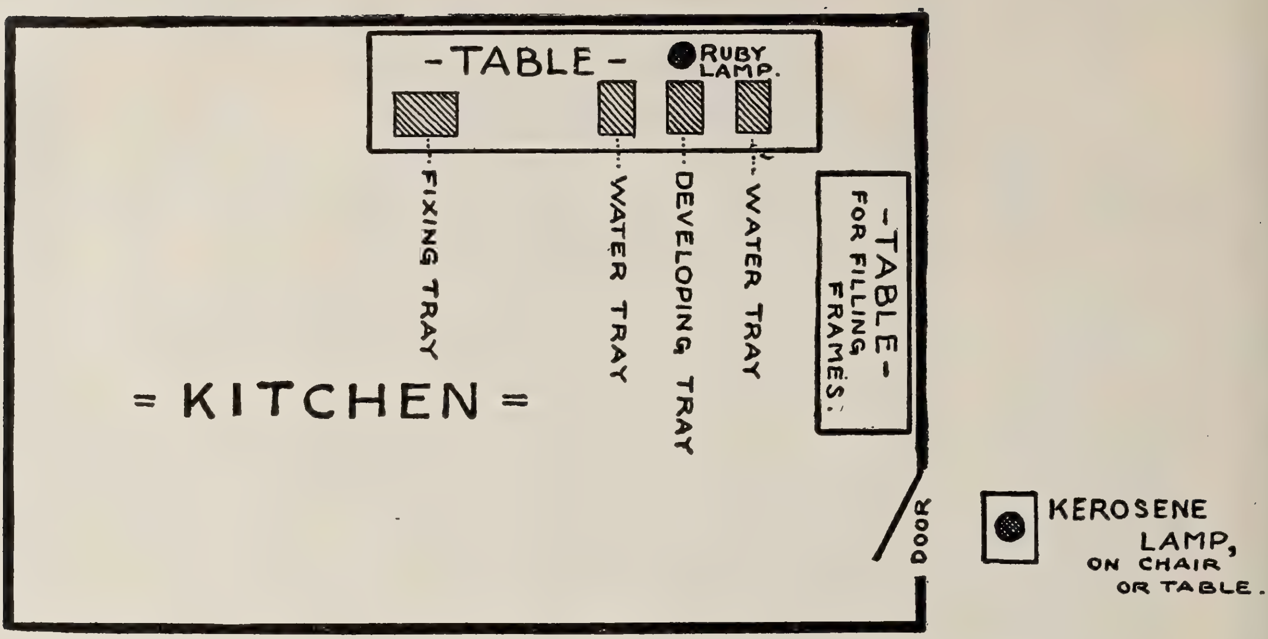
Fulton, Ill.

Editor Recreation:

Probably many amateurs, like myself, enjoy photography, but have little available time during the day, and must do their work, if at all, at night. I have been so situated for years, and have had much satisfaction from the use of bromide paper. This paper is made by several firms, and may be had in a variety of surfaces and weights. In working and results it differs from other developing papers only in sensitiveness. It gives beautiful and permanent results in black and white, and is easier to work and get good results from than any of the printing-out, or sun-printing papers. Velox, Dekko and Cyko developing papers are good, but they will not do for the man who must print at night, with nothing stronger than a kerosene lamp.

For the all around purposes of the average amateur. I recommend Eastman's platino bromide, A, hard. As I have no regular dark room, I use any convenient room, generally the kitchen. For convenience in printing and developing I arrange things as shown on diagram following.

Being extremely sensitive, the bromide must be handled by ruby or yellow light. I use one table for filling the printing frame and another for developing.



Print by exposing the frame to the light of a lamp which is placed in a chair just outside the kitchen door, in the next room; perhaps a closet or pantry. Keep the paper on the table covered from light when opening the door to print. With a No. 1 burner an average negative will print in about 10 seconds, at a distance of 3 feet. Find the proper exposure by testing with small slips of paper.

The operations of developing and fixing are the same as for any other developing paper, except that developer should be ½ as strong as developer for Velox, etc. Slide the print into clean water, face up, to avoid air bubbles. Then transfer to developer. Rock, or keep turning the print to make development even. The image should come up slowly, clear and brilliant. Stop it when it has reached the right point by rinsing an instant in another tray of clear water, and then put in an acid fixing bath. Fix 15 minutes or longer, wash thoroughly, and mount same as any print. The developer may be used repeatedly, till worn out. If exposed right, a print will develop in about a minute

M. Q. developer is my favorite, and may he bought ready for use, or better and cheaper, make it yourself. Here is the formula:

Water	10 ounces.
Hydrochinon	30 grains.
Metol	7 grains.
Sulphite soda, crystal	½ ounce.

Carbonate soda, crystal, 400 grains, or 200 grains granular.

10 per cent. solution bromide potassium, about 10 drops.

For use with bromide paper, or plates, dilute with equal bulk water.

Acid fixing bath, for bromide paper:

Hypo	4 ounces.
Water	16 ounces.

When dissolved add:

Water	3 ounces.
Acetic acid	¾ ounce.
Alum	⅛ ounce.
Sulphite soda	⅛ ounce.

These are Velox formulas.

The directions that come with bromide papers generally recommend an iron-oxalate developer. M. Q. is much simpler and cheaper and gives as good results, with no Congress from that State in November, danger of yellow stains.

G. W. Damon.

MOONLIGHT PHOTOGRAPHY.

Pictures photographed by the light of the moon have the merits of truth, sweet softness and scarcity. They are not to be confounded with pictures taken by daylight toward the sun and printed too deep. Those fake moonlights are striking and effective, but they are wholly devoid of truth.

One of the best pictures I ever made was a view of a church rectory and graveyard. with the soft light of a full moon playing on the dark stone work and the large church windows. I used the 100 foot mark on the scale, a rapid rectilinear lens at f 22, and allowed 20 minutes with an instantaneous iso plate. I exposed another plate, so anxious was I to secure the view, and fearing undertime I gave the next half an hour. Both developed readily and I am of the opinion that the 20 minute one is the best, though both are good. The result, called "Quietude," is the most admired picture I ever made.

I have found by experiment that by full moon with the plate named, which is very sensitive to yellow light, and f 22 I can get these pictures every time. I print in platinum and generally dip the print in weak bluing after developing and washing. W. P. Oxford, in the Photo-American.

SNAP SHOTS.

What causes transparent spots on my negatives after developing? Can I get an extra bellows made to fit in the back of a Korona Series 1, to slip in where ground glass is? Have any readers of RECREATION any negatives of the Pan-American for sale; 4 x 5 preferred.

Jos. B. D., Allegheny, Pa.

ANSWER.

Bubbles cause transparent spots on negatives. If you keep a tuft of cotton in the tray with the developer and rub the photo gently with it soon after it is wet you will do better. Use fresh cotton each day, of course. A smart rap or 2 on the end of the tray while developing is also good.

Gundlach Optical Company, Rochester, N. Y., can tell you about bellows for their Korona cameras. You can obtain prints of all the exterior views of the Pan-American Exposition, with clouds in all, from E. W. Newcomb, Bible House, New York; 25 cents each, unmounted, or for less price in quantity.—EDITOR.

Have you a formula for printing and toning on silk?

E. N. Stephenson, Moline, Ill.

ANSWER.

Wash the silk in warm water. Float on following bath 2 minutes:

Salt	10 grains
Water	1 ounce
Ammonia	15 drops

Hang up to dry. Sensitize by floating on following bath:

Silver nitrate	150 grains
Water	1 ounce

Dry and mark through back. Print deep and tone in any good toning bath, say water, 8 ounces; gold, 1 grain, in 1 ounce water, to which add 5 to 8 grains of bicarbonate of soda.

Fix in hypo soda 1 ounce, water 8 ounces. Wash well and dry.—EDITOR.

Can you, or any of your readers, tell me how to obtain a good negative from a moonlight exposure? I am most anxious to get a good moonlight print, and should like to know what exposure and diaphragm to use in order to obtain the best result.

Arthur L. Owen, Keating Summit, Pa.

ANSWER.

When the moon is full, you can take a good picture of a light object with your lens at full opening in about 10 minutes. If you stop down to 16, you would better give 20 minutes. This will fully time white houses or other light subjects. Increase according to darkness of subject as necessary. A dark colored house should have full illumination at 10 p. m. and an exposure of nearly an hour on an iso plate. Let the lights in the house be lighted about 5 minutes, then turned out if you wish the windows to show.—EDITOR.

The following formula has been used successfully for the preparation of a photographic basis on ivory for miniature painting.

Silver nitrate	3 parts.
Uranium nitrate	30 "
Alcohol (Atwood's patent)	100 "
Water	10 "

Make up this solution and apply to the ivory with a soft brush. Dry the sensitized surface so prepared in the dark and afterward print by contact in daylight. Fix the picture printed by immersing in water acidulated with nitric acid. Rinse in clean water and dry.

It is essential that the surface of the ivory be absolutely clean; the least trace of grease or moisture will cause patchy prints.—Professional and Amateur Photographer.

I am glad to see in March RECREATION that brother Murray is interested in forming a RECREATION camera club. I hope we can get this good work started. It will be of interest to all who are lovers of photography and of RECREATION. The photo department of RECREATION is of great benefit to amateurs. I have learned more from it than from photographic periodicals, of which I read many. I am in favor of forming a club of readers of RECREATION, to be known as RECREATION Camera Club, and suggest that each member give a small fee, to help the good work along. Some day let us have a convention. I hope other readers of RECREATION will give their ideas and suggestions in future issues of the magazine and that we may soon organize the club.

O. H. Hill, Colorado Springs, Colo.

After many experiments and failures, I have come to the conclusion that the best outfit is the plates, pyro developer, Dekko and Dekko developer put up by the Eastman people, which makes 4 ounces of developer and costs 5 cents. Every amateur should have a set of Manning's masks, worth 25 cents. There are about 15 in the package, varying in shape from a square to a heart. By the use of these masks a picture is improved 100 per cent., and it is not necessary to trim prints after using these masks. They save much time and paper. The result is, the atmosphere around you is not quite so blue, and your chance of meeting your friends on that beautiful shore has not decreased.

P. R. Finlayson, Secamous, B. C.

Will you please advise through RECREATION if formaldehyde will prevent frilling? If so, how should it be used and where can it be obtained?

S. E. Taylor, Morgantown, W. Va.

ANSWER.

Formaldehyde will not prevent frilling to any extent. Ice is the only thing for that; but formaldehyde will make your film insoluble and prevent melting. It will also toughen the film. You can buy it of any druggist who carries a fair stock. Get full strength and add one ounce of it to 9 ounces of water. Of this, use 2 drams in a pint of water and drop plate in when it needs it.—EDITOR.

Last winter I had several bottles of toning and fixing solution and developing solution which froze in the bottles. Would the solution have been all right if I had thawed them out?

Frank Liebig, Belton, Mont.

ANSWER.

I have had numerous inquiries similar to yours and to satisfy myself I have frozen a number of photographic preparations, have let them thaw gradually, and have then tried them. In no case has there seemed to be any deterioration. Do not use the thawed chemicals till they are of a comfortable temperature. Cold solutions work slowly and give strong contrasts.—EDITOR.

Please tell me how to prevent films from curling after they are dry. Can they be stiffened to stay flat?

J. Schants, Woodhaven, N. Y.

ANSWER.

After developing, fixing and washing your film, soak it 5 minutes in a solution of ½ ounce glycerine in 15 ounces of water. From this glycerine bath pin your films up at once on soft pine boards, using a pair of pins at least every 8 inches if you pin up the whole strip at once. Then keep your films between 2 cards, with a rubber band around them, and they will always stay flat.—EDITOR.

Please give me a formula for making chloride of gold from old gold.

E. F. P., Colmesneil, Tex.

ANSWER.

Chloride of gold is made by dissolving pure unalloyed gold in aqua regia by gentle heat, evaporating, drying and redissolving in water if wanted for toning. When buying the gold at an assay office the chemist will tell you exactly how much aqua regia to buy for the amount of gold you get. The process of making the chloride is not pleasant unless the dissolving can be done in a well-ventilated room, as the fumes given off are choking.—EDITOR.

Will you please state formula for the developer you consider the best for general use? Also kindly state reasons why it is best.

D. C. McRae, Greenwood, B. C.

ANSWER.

I consider the pyro developing formula given by the maker of the plates you use the best, for the reason that the maker knows his plates better than anybody else, and gives, free, a formula that his chemist finds to produce the best results. All buyers of plates should use just what the maker recommends, or never kick at the plates.—EDITOR.

Will you kindly inform me through RECREATION if there is such a thing as a folding dark-room lamp? If so, where can I buy one?

John S. Miller, Jr., Chicago, Ill.

ANSWER.

There are many. The nearest places to you are Burke & James, 118 West Jackson boulevard; Almer Coe, 74 State street; or Ralph Golsen, 72 Wabash avenue. These lamps cost about 75 cents, and use a candle.—EDITOR.

To avoid blistering of albumen paper: Do not dry the paper by excessive heat.

Avoid acidity in solutions.

Moisten the print, before washing, with a sponge saturated in alcohol.

Immerse the print, before fixing, in a weak alum.

Add a trace of aqua ammonia to the fixing bath.

Add 1-10 part of alcohol to the ordinary toning bath.—The News Monger.

Will you tell me what makes platino tints blister?

Chas. H. Stortz, Racine, Wis.

ANSWER.

If you will keep all the solutions the paper has to go through at the same temperature you will probably never have trouble with blisters. Changes from cold to warm or *vice versa* cause them. EDITOR.

IF IT ISN'T AN EASTMAN, IT ISN'T A KODAK.

The largest clock keeps no more perfect time than a pocket chronometer; the largest camera makes no more perfect picture than a pocket Kodak —'tis the Kodak quality.

Not only does the Kodak go inside the pocket but inside the Kodak goes the film — all becomes one compact, self-contained mechanism.

THE KODAK GIRL.

KODAK FILMS,

By reason of their non-halation quality and because of the great "latitude" which they give in exposure, produce better results than glass plates. Kodaks load in daylight—plate cameras require a dark room.

Kodaks, $5.00 to $75.00.

A new folding Kodak for the pocket, almost for the vest pocket, at $6.00.

Catalogues free at the dealers or by mail.

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$4,000.00 in Prizes for the Best Kodak and Brownie Pictures.

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VERASTIGMAT

(True Stigmat.)

A Convertible Lens

Some Anastigmats are better than others but none is better than the VERASTIGMAT

We don't ask you to believe it because we say so, but we would thank you to test the

VERASTIGMAT—MAN

A Wide Angle Lens

VERASTIGMAT side by side with all others before you buy

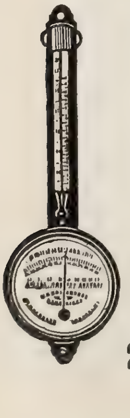
Send for our booklet; it is instructive and interesting, and to be had for the asking. Mention RECREATION

Manhattan Optical Co. of N. Y., - - Cresskill, N. J.

FREE To everyone who will send in a subscription to RECREATION through me I will give, free, a photo of the late President McKinley; or of the Esplanade, or any of the buildings at the Pan-American Exposition. These photos are all on Velox or Aristo paper. The one of President McKinley was made September 6th, the day he was shot. All prints perfect. F. E. WILKINSON,
172 Woodlawn Ave., Buffalo, N. Y.

Free: For 1 year's subscription of RECREATION, through me, will give 1 Bromide enlargement, any size up to 11x14 inches inclusive, from any negative not larger than 4x5; or from photographs. Negatives and Photos to be returned to the owner. Here is a rare chance to get a large Photo from your pet Negative, also RECREATION for $1. A. F. Evarts, Meriden, Conn.

FREE DESCRIPTIVE BOOKLET ON HUMIDITY.



The Polymeter is an instrument to measure the percentage of relative and absolute Humidity.

Invaluable in testing the air we breathe, whether too dry or too moist.

Indispensable in forecasting rain, storms, frost or clear weather.

Gall & Lembke
ESTABLISHED 1842.
21 UNION SQUARE, NEW YORK CITY.

It is all in the Lens

Any old box will answer the purpose if it does not leak light; but you must have a fine lens to make a fine picture.

You can get

A Royal Anastigmat Lens, 4x5, Series No. 1

Made by the Rochester Lens Co., Rochester, New York,

And listed at $45, For 40 yearly subscriptions to RECREATION

You can get any other lens made by this Company on the basis of one subscription to each dollar of the list price of the lens.

Sample copies of RECREATION for use in soliciting furnished on application.

VOLUTE

Smallest, Fastest, Most Convenient

Iris Diaphragm Shutter

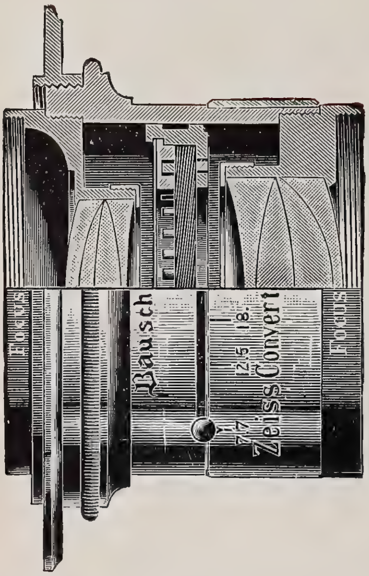
Fits any Lens   Precise as a Watch

Volute is the latest, most complete, accurate and desirable photographic shutter. It gives every exposure from 1-150 second to 3 seconds, time and bulb beside. It can be applied to any lens. Bausch & Lomb-Zeiss Anastigmat or Plastigmat Lens and Volute Shutter make the ideal combination for your camera. **Send for new booklet about Shutters**

Bausch & Lomb Optical Co.

New York   ROCHESTER, N. Y.   Chicago

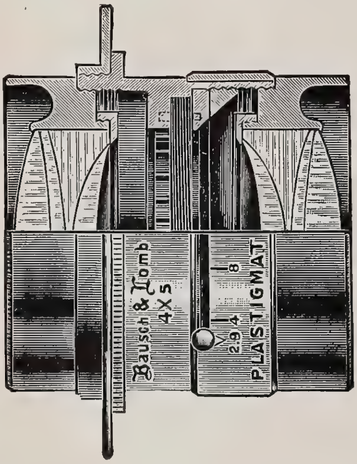
Bausch & Lomb-Zeiss Convertible Anastigmat



3 LENSES IN ONE

The Convertible Anastigmat represents the highest attainment in lens making. The speed ranges from *f-6.3* to *f-7.7* in the doublets and for the single combinations is *f-12.5*. It is suitable for all kinds of work from the fastest snap shots to portraiture and long distance photography. Circular tells more.

Plastigmat f-6.8



The Lens of the Century

Plastigmat *f-6.8* is the newest of the high grade lenses made by us and is constructed especially to elminate the undesirable features of the older lenses. Optically and physically it is the pink of perfection. Rapid, immense illumination, no astigmatism, absolutely permanent glass. Either combination can be used separately for long distance or portrait work.

REPRODUCTION OF FIVE DIFFICULT PLASTIGMAT PICTURES FREE.

Bausch & Lomb Optical Co.

New York ROCHESTER, N. Y. Chicago

Pictures
Worth Framing

are made with the Pocket Poco, the smallest complete camera ever constructed. Weighs but 17 ounces. Measures 1⅞ inches thick, 4¼ inches wide, 5¼ inches high. Makes a perfect picture 3¼ x 4¼. Not merely a snap-shot camera, but a thoroughly equipped instrument, allowing the worker the widest latitude in every branch of artistic photography. The

Pocket Poco

is fitted with a rapid rectilinear lens and iris diaphragm; an automatic shutter; a 7-inch bellows; a ground glass for accurate focusing; a perfect finder for snap-shot work; an actuated spring-back for the use of PLATES OR FILMS. See it at the dealer's, or send for book describing full line of Pocos for 1902.

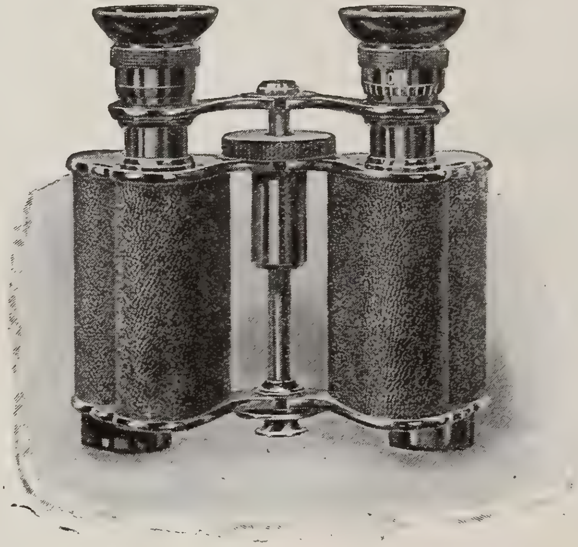
Price, Complete, $9.00.

ROCHESTER CAMERA AND SUPPLY COMPANY,
522 Poco Street, Rochester, N. Y.

The Turner-Reich Binocular Field Glasses

cannot be compared with glasses of the old type and have so many advantages over those of ordinary construction that any user of such an instrument cannot afford to overlook their merits when selecting a field glass.

The principles of optics governing the Turner-Reich Binoculars permit them to be made ⅔ smaller for a given power and at the same time include a larger field of view. They magnify more and give brilliant, crisp definition with a perfectly flat field. They can be adjusted for any difference existing between the eyes of the user and also for pupillary distance, an advantage seldom possessed by a field glass which insures perfect coincidence of the image as seen by each eye and prevents the eyes being strained or tired when using the glass. They are made in 6, 8 and 10 power, magnifying that number of diameters. Each Binocular is furnished in a sole-leather case with shoulder strap. We would recommend them to



SPORTSMEN OF ALL KINDS WHO REQUIRE A PERFECT AID TO VISION

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Rochester, N. Y.

Catalogue Free Mention Recreation.

IT'S ALL IN THE LENS

Exposure $\frac{1}{1000}$ part of a second f 7.5.

THIS remarkable picture was made with a Turner-Reich Anastigmat Lens, 8 x 10 size, and considering how close the subject must have been placed to the lens, the definition is wonderful. Note also the even illumination from corner to corner.

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Our Patent Automatic Swing-back Extension and Auxiliary Bed, for use with wide angle lenses, are exclusive improvements found only on

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GUNDLACH OPTICAL CO.

ROCHESTER, N. Y.

THE REMINGTON AND A NEW SIGHT.

In November RECREATION Geo. McGowan champions the Stevens Favorite pronouncing it the "simplest, safest, most durable 22 rifle" he knows of. I admit its accuracy, but that it is simpler, safer, or more durable than the Remington No. 4 I deny. Four years ago I bought for a friend a Stevens Favorite 22 caliber. My little boy already owned a Remington No. 4. With these 2 rifles my friend and I often spent an afternoon at the target. He is a good shot and was mighty handy with his Favorite. I have warped along well toward 3 score, but for every bull's eye he made, I made a mate. Both weapons were perfectly accurate.

In a short time the action of the Favorite became shaky and the lever hung loose, falling half an inch from the tang. It was repaired, only to wear loose again, and that was repeated time and again. The Remington remained as solid as when I took it out of the store. Can any mechanism be simpler than the Remington flying lock? There is no set screw to keep it in adjustment. It simply can not get out of order. The only thing that could happen amiss would be the snapping of a mainspring, which would be as likely to happen in a Stevens as in any other. As to the comparative safety of the 2 I cannot see wherein the Stevens is superior. Both will explode a shell, if there be one in the chamber when the hammer falls, provided the action is fully closed. After that is said safety depends on the gun-sense of the handler. From a somewhat extensive experience with Ballard, Bullard and Stevens single shot rifles I declare in favor of the honest old flying lock of the Remingtons as against any lever action. Nothing stronger, simpler, more durable, or less subject to epilepsy was ever invented as an adjunct to the rifle.

My friend disposed of his Favorite and bought a Remington. To the latter he has added an amusing little invention of his own. With a brass umbrella handle he improvised a tubular sight which is almost a telescope. Filing the ends square and using the upper slot as a saddle he drops it over the front sight, which protrudes far enough into the tube to show its point nearly in the center. The tube, extending back to near the crotch sight he secures firmly to the barrel the end passing through a small wooden disc flattened in one part of its circumference so as to set firmly on the upper octagonal face of the barrel.

Aiming, he peers through that umbrella tube. One can but laugh at the ludicrous object, but when he sees the shooter drive a tack he begins to want to try it too. A peep through it shows the bull's eye standing out like a huckleberry in a bowl of milk. Let some inventive experimentalist try it.

W. H. Nelson, Washington, D. C.

THE LAKE BURNABY AFFAIR.

The story of the killing of a deer, on Lake Burnaby, with hockey sticks, is true. There were a number of skaters on the ice when a deer, chased by dogs, came out on the other side of the lake. It broke through the ice and could not extricate itself. The skaters went, at great personal risk, and pulled the animal out, with the intention of getting it for the zoo. They found that its hind leg was badly broken and was twisted entirely around. In order to put the unfortunate animal out of pain as quickly as possible, the skaters killed it with their hockey sticks, having no gun at hand.

No one knows whose dogs did the running. The fact that there were no hunters out indicates that the dogs were running on their own account. The local paper remarked at the time on the pity of the killing, but stated that nothing else could have been done in the interests of the unfortunate deer.

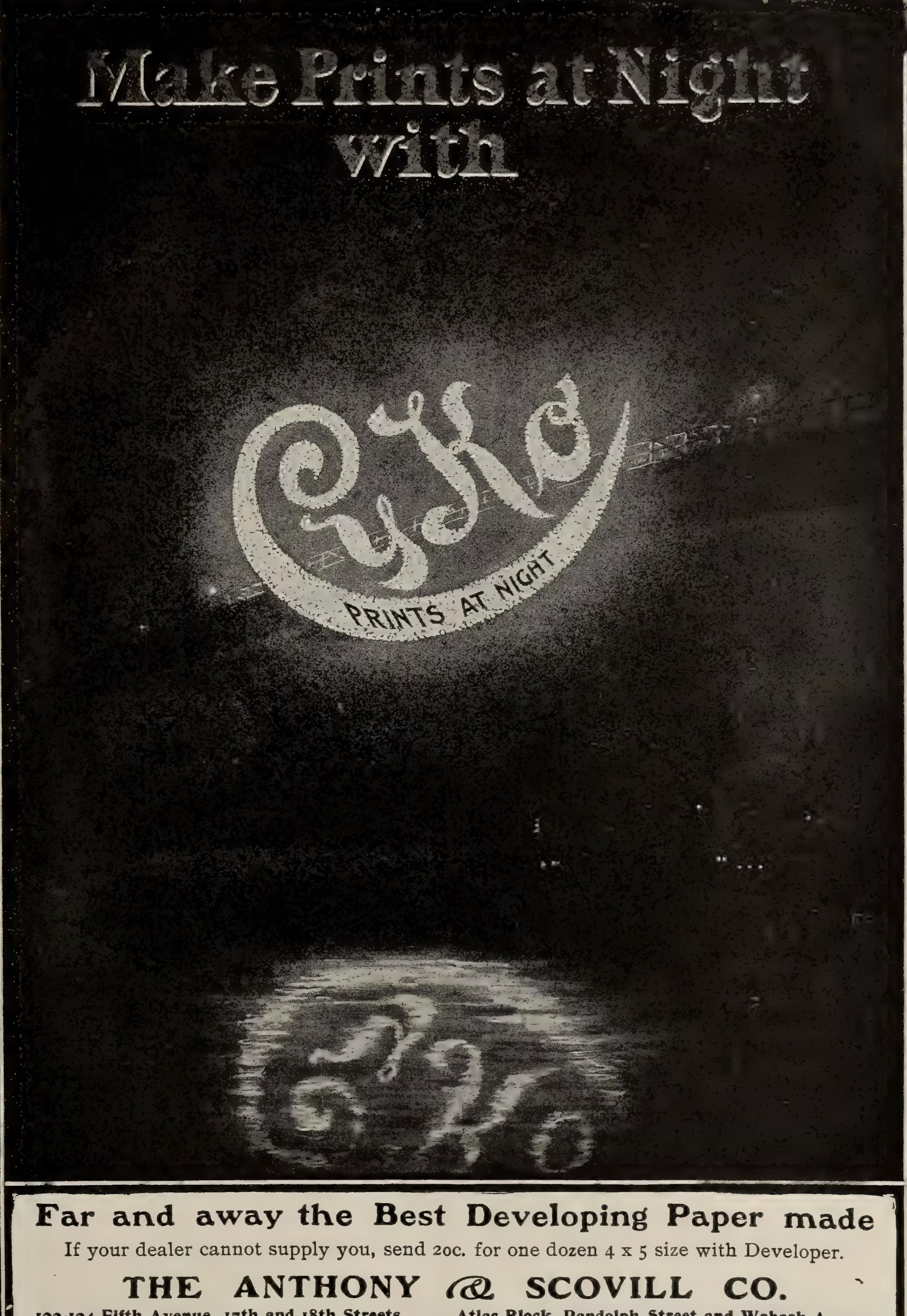
As to dogs running deer, it is said to be practiced all over the Province. The Indians do it; also the foreign white population who are living Indian fashion, fishing in summer and hunting in winter. Deer are inconceivably thick in this country, and in some parts comparatively tame, so their slaughter is an easy matter. The slaughter of water fowl here in the spring and fall is shameful, and so far there seems to be little attempt to check it. Once in a while a case of infraction of the game laws is dealt with and a severe penalty imposed; but not one in 100 is punished who should be. I fear the L. A. S. would have a hard time making a record for itself in this Province just now, on account of the unsettled state of affairs and the extreme difficulty of dealing with men who have no fixed abode, but who shift their homes as often as it suits them.

G. A. Manchester, M. D., New Westminster, B. C.

I have been thinking of buying a '94 model Winchester 38-55. That caliber makes a good showing in the Winchester tables of comparative power, and the letters of S. O. S. Graham and others confirm it. There are many who do not like the smokeless small bore, and I am one of them. Why would not a Lyman sighted 38-55, loaded with 50 grains of powder and 235 grain hollow point ball, do good execution on large game? Should like to read comments on this gun and cartridge.

W. E. Stevens, of Windham, N. Y., can undoubtedly hold his own against the cranks who denounce the use of the shot gun for bird shooting. Nor is there any need for me to help defend the pump guns. They certainly could do no more harm than the costly double barrel that C. M. Powers had at Karnes City, Tex., as told by Mr. De Loach in November RECREATION.

M. A. Stout, Mackinaw, Ill.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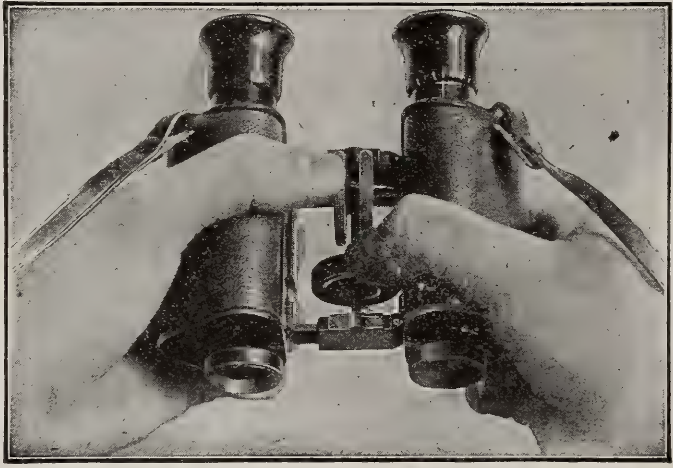

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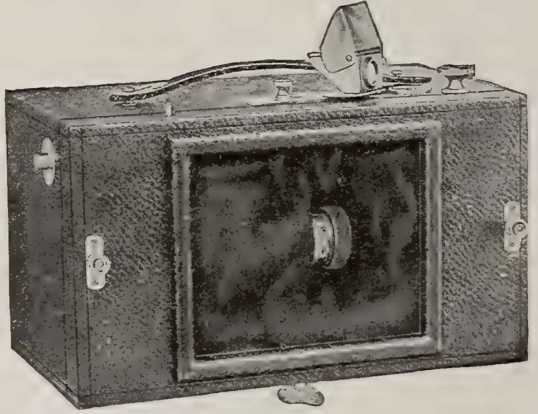

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A whole army
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For particulars address

RECREATION, 23 West 24th Street
NEW YORK CITY.

RECREATION is the best magazine I ever read. I admire the courage with which you assail law breakers. I once had no better sense than to shoot and fish regardless of the law, but reading RECREATION has entirely changed my ideas and actions. You have done more for game protection than any other thousand men in the United States, and you never knew one in a thousand of the converts you have made by your fearless and persistent efforts through RECREATION. It is extremely gratifying to me to noitce that during the last few years the farmers in this section have been, almost without exception, vigorously protecting the game. They are the salvation of the game and I wish I could afford to put RECREATION in the hands of several hundreds of them. I hope you will continue to succeed in your fight against game hogs.

Walter E. Childs, Kingswood, W. Va.

I will send by registered mail, post paid, 50 5x7 views printed on either Vinco, Solio or Velox paper, and mounted in a Buechner album, for $8. These views are of live and dead game, mountain scenery, lakes, waterfalls, fishing scenes and park views. A sample print will be sent for 15 cents in stamps.

S. N. Leek, Jackson, Wyo.

I have copies of these pictures and they are worth to any sportsman 5 times the price Mr. Leek charges.—EDITOR.

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Prints in any Light

yet requires no dark-room for development. Gives pure black and white prints of surpassing depth and richness.

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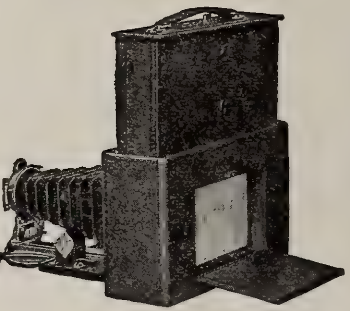
A new Hawk-Eye Camera that uses daylight loading film cartridges, and may be focused on the ground glass. An instrument that appeals to the most experienced workers.



The touch of a button releases the film carrier, which is then pulled up by the handle, the ground glass springing automatically into place. Instant and positive in operation. The focusing scale may, of course, be used when desired. An extra extension to bellows permits of working to within 18 inches of subject.

Improved rising front, B. & L. Automatic Shutter, with iris diaphragm stops. Finest Rapid Rectilinear Lenses. Perfect in construction and finish.

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BLAIR CAMERA CO., Rochester, N. Y.

The Rocky Mountain Goat

ranges almost wholly above timber line and in the wildest, rockiest portions of

The Rockies and the Cascades

Few men in the country have ever been able to photograph this rare and interesting animal. One of RECREATION'S staff photographers did succeed in making some fine photographs of goats, and I have had

A Few Enlargements

made from the negatives. One of these shows two goats, broadside on. The other shows three resting on a narrow shelter of a perpendicular cliff. Two are lying down; another is standing up, headed away from the camera, but has turned and is looking back.

The two pictures make an extremely interesting series of studies of the white goat. These photographs have never been equaled in this line and probably never will be.

The prints are 10x12 in.

and are on white mounts 12 x 16.

Price, $2 each.
How many will you have? Address

RECREATION, 23 W. 24th Street, New York

Several years ago you published an account of the experience of a lady who spent some weeks on an island in Lake Huron. That article drew me to the same locality and I have since been a regular visitor, with my family, at those islands. The accommodation is being much improved. A large camp is being built this year. The Ontario Government is also giving an annual open season at last for moose and caribou, North and West of the Canadian Pacific railroad, between Mallawa and Port Arthur. These animals have been protected for a number of years. Geo. Linklater, a Hudson Bay agent for 25 years, although still in his prime, who is manager of the large camp at Desbarats, Ontario, says he can provide plenty of moose. His programme is to outfit at Desbarats, then take the train to Biscotasing station and canoe down from Biscotasing to Dayton or Desbarats. He managed a Hudson Bay post in the moose country on the upper Mississaga river for 10 years, knows all the Indians and is himself a famous hunter. Either a fortnight or a month of shooting can be enjoyed in this way with all the fishing any man wants thrown in. The Indian play of "Hiawatha" is now given at Desbarats annually. It is very attractive and is drawing people from all sections. A number of Americans are at Desbarats but there is room for more.

S. H., Chicago.

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TO THOSE WHO HAVE NOT SEEN THE work produced by these remarkable Panoramic Cameras it is a revelation. The Revolving Lens takes everything in sight, working on the principle of a focal plane shutter.

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We are selling directly to the consumer from the factory. We have adopted the plan of selling these cameras on monthly payments. You have the camera while you are paying for it. This certainly shows our confidence both in our cameras and in human nature. Write us for full particulars.

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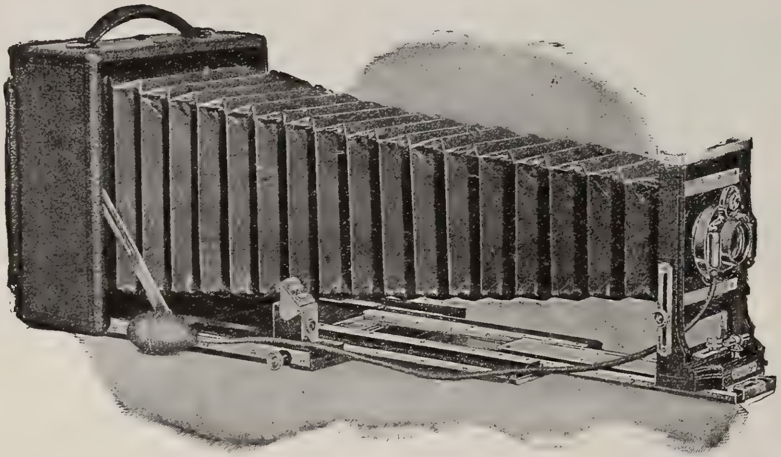

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CENTURY CAMERA CO., Rochester, N. Y.

Mention RECREATION.

As I have gained many useful ideas from your valuable magazine I feel it my duty, as an angler and a sportsman, to emphasize the importance and value of the Marble Safety Pocket Axe to the fly fisherman. It is to me an indispensable article, paying for itself daily in the saving of flies and leaders from the limbs of trees, the tops of alders, etc., as well as the saving of time and temper. I use it a great deal in clearing away limbs, bushes, etc., and in opening the way to a successful cast at a beauty-spot, where *fontinalis* is almost sure to be ready the next time I happen that way. One will be amazed at the work this little axe will do. It is indeed no toy—light, effective, but hard to keep in your possession when once your angling comrade sees it. I have bought 3 of these axes this season, and I now keep a string on the last one.

Dr. G. F. Richardson,
Mount Pleasant, Mich.

I can not understand why Eastern sportsmen ask so many questions about 25-35, 30-30 and 30-40 guns. The .303 Savage will take the place of those calibers and is better than any of them. I used one on the Yukon, and of 18 moose shot with it only one required a second bullet. I killed 5 bear with one shot at each. There is no rifle equal to the Savage.

Julius Sternberg, Kasson, Alaska.

Belle—What are you going to contribute to the tea party?

Rose—One of the subjects of gossip. I shall not attend.—N. Y. Herald.

Little Ethel.—"Mamma, I know why it isn't safe to count your chickens before they're hatched."

Mother.—"Why, dear?"

Little Ethel.—" 'Coz sum of 'em might be ducks."—Ohio State Journal.

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To save plates use a Wager Exposure Scale. It tells you the correct exposure in every case, and saves its cost in a month. No sensitized paper, no multiplying in the head—that's a nuisance, and besides you may make a mistake. Endorsed by the Editor of RECREATION. Post free, 50 cents. Aluminum, $1.00. Your money returned if you don't like it. Send a postal for our Booklet No. 5, lots of hints and formulæ.

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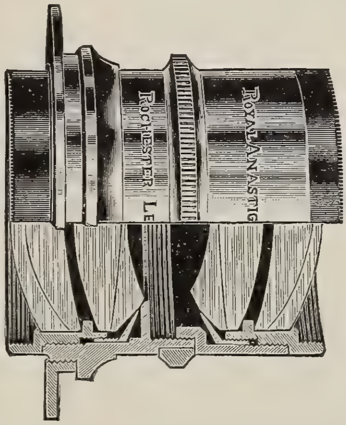

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THE ROYAL ANASTIGMAT is of the double symmetrical type, each system consisting of four elementary lenses. The absolute freedom from any trace of astigmatism, and the complete correction of the spherical and chromatic aberrations without the least remainder of aberrations of the higher order, constitute the superiority of the lens. Royals are made in three series, varying in relative aperature from F-7.7 to F-5.

For all kinds of weather, all kinds of pictures, and all kinds of people, get a ROYAL. The great speed and fineness of definition, are just what you want for your hunting and fishing expeditions. Write to-day and let us tell you more of the good qualities of these Lenses.

ROCHESTER LENS CO., = Rochester, N. Y.

Mention RECREATION.

GOOD NEWS FROM CONNECTICUT.

The last shooting season was one of the most successful that Connecticut sportsmen have known. It was also their first experience under the law passed in 1901 prohibiting the sale of game in this State for 2 years. The law is naturally displeasing to pot hunters. Heretofore men who shoot for market have made a fat living between the sale of game and the training of bird dogs. These men, aided by the snarers, were fairly exterminating our birds. It remained for the League of American Sportsmen and the Audubon Society to find a remedy.

They managed to get members of the General Assembly interested, and through the efforts of those men and of the Fish and Game Commission the law was passed. Previous to this a law had been passed that not more than 5 grouse should be taken in any one day by one person, or more than 36 in a season, but that law it was found impossible to enforce.

The open season now is October 1st to December 1st, and sportsmen who have the interest of the birds at heart say that it should be October 15th to December 15th. They argue that the extra 2 weeks in October would give many a flock of quails a chance to mature. During the past season many half grown quails were shot, and in some instances unfeeling sportsmen shot the mother bird as she arose alone, thus leaving the youngsters to

Notwithstanding quails were unusually plentiful, grouse were unusually scarce. That was attributed to the late, wet spring and to the wood ticks, which, in such seasons, attack the young birds with fatal results. That theory was borne out by the fact that most of the grouse shot were old birds. Woodcock were abundant, and again wet weather was responsible, this time, however, advantageously. In 1900 dry weather kept the woodcock away from their favorite local feeding grounds, and forced them to seek other sections of the country. But 1901 was wet enough to suit the most fastidious woodcock, and a fine crop of earthworms and slugs was ready for the long bills when they came down from the North.

Both rabbits and gray squirrels were plentiful. Rabbits may be hunted until January 1st. Again the sportsmen find fault, for they say men will go out ostensibly to hunt rabbits and in reality will shoot grouse and quails. Marketmen and others have found fault because they were not allowed to buy or sell game, but while undoubtedly much game has been traded for rum and tobacco, still the law has proved effective in protecting game. If at the close of the 2-year limit its effects are sufficiently pronounced, no doubt it will be continued for another period, as was the law on deer, which was extended 10 years. Pheasants cannot be legally shot until 1906.

J. H. Conklin, East Hampton, Ct.

FROM FLINT LOCK TO SAVAGE.

Northumberland, Pa.

Editor RECREATION:

In my young days we hunted with the rifle. I remember the first shot guns ever seen in this region and the derision with which they were greeted. They, like our rifles, had flint locks. I remember the first cap lock gun ever brought here.

Now I have three nephews growing up. They want all around rifles. What is an all around rifle anyway? Personally I have fallen back on a 45-70-405, using a reloaded cartridge and a round ball to kill beeves, etc; yet I sigh for the day when we used the same round ball and larger or smaller loads of powder, as our judgment dictated. for all game shooting. For bear we put in a big dose of Dupont's rifle powder and shoved down 2 balls.

I am behind the times; a way back number. I look at the Winchester catalogue and am astonished at the number and variety of guns and shells. I read the book of the Remingtons and wonder why a foreign rifle is used in the U. S. Army. I study the Savage with its light weight and variety of cartridges and puzzle over the problem of why it is .303 caliber instead of 30, like other guns used here. I wonder if it is possible that a powder charge of 22 grains gives a penetration of 50 inches, when a charge of 30 grains gives only 30 inches.

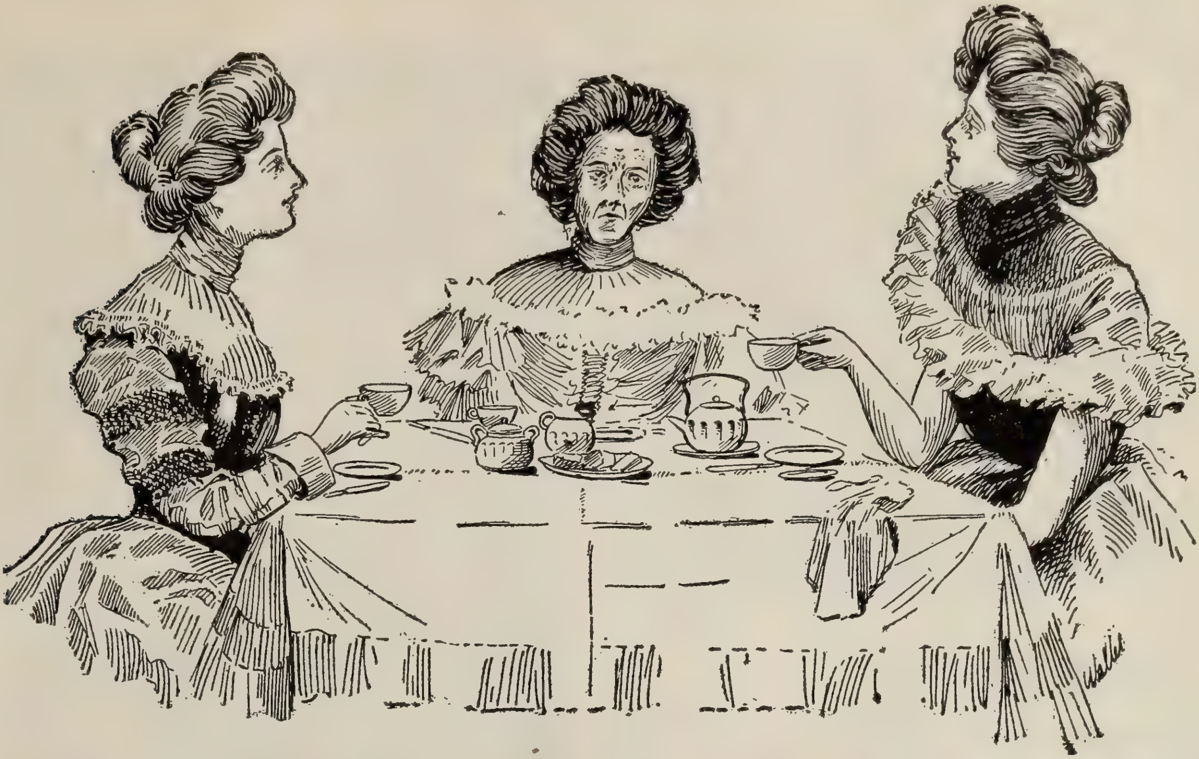
Then I turn for light to riflemen who are really using these guns. My friend W. has shot all over the West, from Puget sound to Lower California, and was once a meat hunter for the Denver market. He tells me he has used all calibers of black powder guns and killed with them, but a 50 caliber, 110 grain beats them all. I believe him, yet one does not like to turn a cannon loose on a squirrel.

Friend K owns a Krag. He assures me it is out of sight, though a little complicated perhaps and not good for squirrel barking. P. pins his faith on a 38-55. It is all right, he says, but he wishes it had more powder and the ball was a little heavier for deer, etc.

The Savage rifle has 2 features I like. It is really a revolver. There is no spring forcing the cartridges down on each other, possibly to cause an explosion in the magazine. Another good point is that you do not have to use a 2,000 yard load to kill a squirrel. The small 30-30 cartridge has not enough powder. Not that I wish to reflect on the Winchester people or on our dead and gone friends the Marlins. High power rifles need just such a variety of cartridges as the Savage people have provided.

The opinions of different riflemen expressed in RECREATION are undoubtedly educating us all; nor do I know of any other publication that is doing as much to bring order out of the present confusion. and settle the question as to what is the nearest approach to an all around rifle.

Jno. A. Elliott, M. D.



The AMERICAN HABIT.

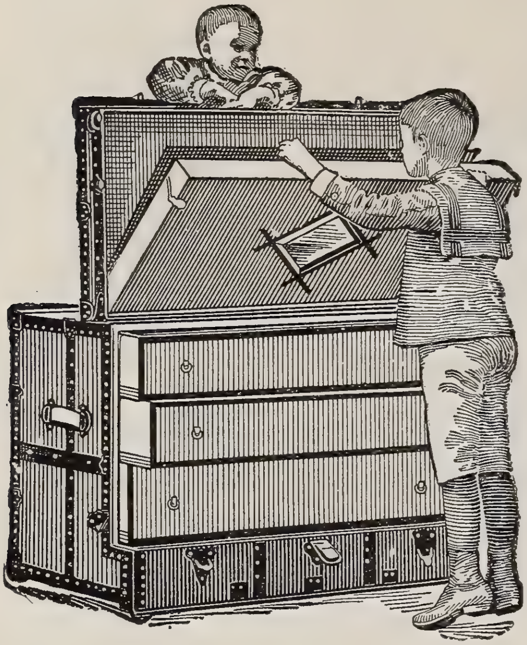
One in Every Three Affected.

Of the coffee drinkers in America, it is estimated that one in three are partially disabled from broken-down nervous systems. America is the greatest consumer of coffee in the world. Can you draw the correct inference from these two facts?

Many a person will exclaim "Nonsense!' It is easy for any thoughtless person to jump at a conclusion that a philosopher would study carefully over before reaching. Think of the members of your own family; how many of them are perfectly and completely well in every respect? How many of your friends are perfectly healthy? Inquire of them and you will be surprised to learn that the average of one in every three, who are sick, in the main, stands true. Health depends primarily, upon a perfectly poised nervous organization, and the greatest known enemy to the nervous system is coffee. Its active principle is caffeine, which is a pronounced nerve-destroyer. The action is first, to attack the stomach, then the pneumogastric nerve which lies behind the stomach and which is directly connected with the brain.

The disordered condition passes thence from the brain to all parts of the body, and in some it will show in trepidation (well-known nervous condition); in others this is hidden, but the work goes on from day to day, until some day the accumulation of forces climaxes in some organic disease. It may be the kidneys become affected and Bright's disease sets up, it may be weak eyes, may be catarrh, stomach trouble, palpitation and heart failure (which is becoming more and more noticeable among Americans).

Somewhere, you may depend upon it, this work will show forth in the form of disease. It may become so fixed and chronic that it cannot be thrown off. It is hard to induce a man or a woman to give up coffee when they have become addicted to its use, but if such people can be given Postum Food Coffee, they will quickly change for the better, for the food drink, when properly made, has even a more beautiful color than the ordinary coffee, and has the delicious, toothsome flavor of old government Java of the milder and higher-priced grades. The work of reorganization begins at once, for the tearing down element of coffee has been eliminated, and in its place the strong, rebuilding effects of the elements contained in the food coffee go directly to work to rebuild the broken down, delicate gray matter in the nerve centres and brain. This is just plain, old-fashioned common sense that any thoughtful person can make use of; in fact, hundreds of thousands of brain-workers in America have already discovered the fact; and are using Postum Food Coffee, to their very great benefit and relief.



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F. A. STALLMAN,
87 W. Spring St., Columbus, O.

Replying to the letter of "Stub," in RECREATION, would say I have made a counterbore the size and shape of Winchester primer, No. 4. I have some Winchester best grade brass shells which I have counterbored with this tool, and using the No. 4 primer I get as good results, if not better, than I do from either Leader or Smokeless shells. Of course I use a little more wadding than in a paper shell and No. 10 wads instead of 11's or 12's. A brass shell so loaded will work equally well with any smokeless powder on the market, either bulk or dense.

T. R. S., Ithaca, N. Y.

50c. Sheet Music 9c. Any 6 for 50 cts.
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Metropolis Two-step. Caprice, Waltz Song.
Levee Dances. Nonie, Waltz Song.
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Whar De Watermelon Grows, Coon Song.
Pretty Black Eyed Sue, Waltz Song.

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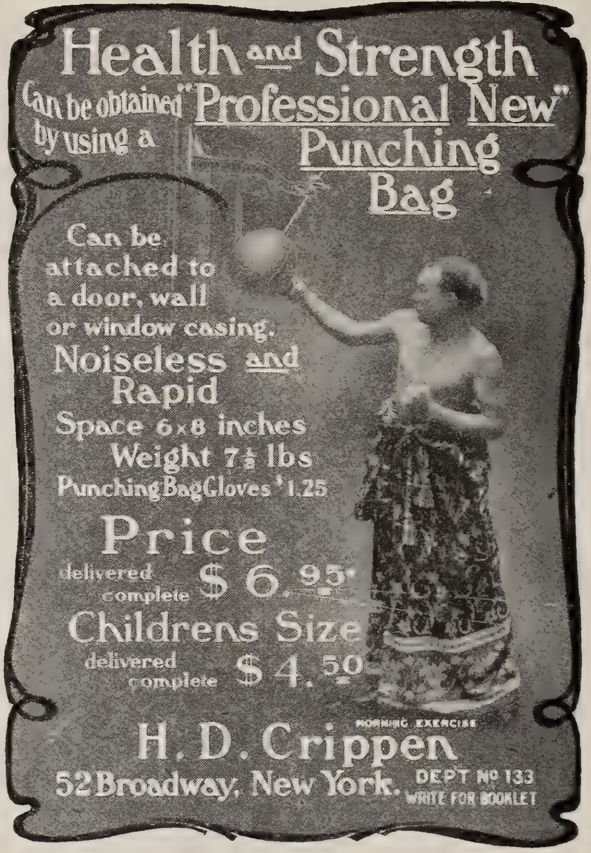

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WRITE FOR BOOKLET

MORNING EXERCISE

The Forehand New Model revolver received and it is indeed a model. Of course I tried it immediately, and though I have not shot a pistol for years, I succeeded in putting 4 holes inside a 6-inch circle at 10 yards, shooting 4 times. I have shown the revolver to a number of my friends and they admire it greatly. We do not see how you can give such a fine present for so little effort. Please accept my thanks. I shall ever be a worker for RECREATION. A. J. Durand,

Morristown, N. J.

The Wizard B camera which you sent me for securing subscriptions to RECREATION came yesterday. Thank you heartily for it.

Chas. A. Blackman, Bakersfield, Cal.

I received the Bristol steel fishing rod and find it works well. Accept my thanks for so valuable a present.

Martin Secord, Wellesley Hills, Mass.

I received the Marble safety pocket axe you sent me. It is a dandy and I thank you very much.

B. A. Sprager, Glenwood, Wis.

The Harrington & Richardson shot gun which you sent me as premium is fine.

John C. Shaw, New Bedford, Mass.

THIS IS NO DREAM.

G. A. MACK.

It is a dream
That all is gold that glitters and all things what they seem.
You can't believe that milk is milk until you see the cream.
Lots of fine, rich mince meat is baked in heavy, sodden crust;
And many a blade of flawless steel is covered quite by rust.
One day 2 missives came; one large and fair and richly tinted,
Written in a finished hand and with a monogram imprinted.
'Twas but a tailor's bill! The other, small and plain, to me was fairer;
In it was a lovely screed, though vilely writ: "Please pay to bearer."
That was no dream!

It is a dream
That you burn all the gas you are charged for in your bills,
Or that you can judge a sportsman by the weight of game he kills.
The better sportsman's well content to get the smaller bag;
'Tis the man who fails to pot the flock goes home and "chews the rag."
A few fish fairly hooked and played and given a fighting show
Will more pleasure to a white man yield than fish hogs ever know.
And that's no dream!

And when we dream
'Tis not the easy shots we've made we love best to recall.
We find our pleasure in the game, not in the score at all.
We joy to think of the duck we stopped as through the dusk it sped,
Of the grouse that flushed at 60 yards and at 70 was dead.
We remember how the snipe was caught long after it had "scaiped"
When far above the alder tops its zig-zag course was shaped.
Memories like these are to the sportsman ever sweet.
The hog remembers best his toil beneath a load of meat,
There was no dream.

It is a dream
That quality and price must bear proportionate relation.
Coquina's dollar magazine contains more information,
More stories crisp, more wit, between its first page and its last
Than all the high-priced monthlies which have waned and passed.
Its circulation is most brisk; its ads will cover 60 pages,
And that, perhaps, is why the feeble opposition rages.

All the world's
a stage.
Elgin Watches
are the
prompters.

Elgin
Watches

are the world's standard for pocket timepieces. Sold by every jeweler in the land; guaranteed by the world's greatest watch works. Illustrated art booklet free.

ELGIN NATIONAL WATCH CO.
ELGIN, ILLINOIS.

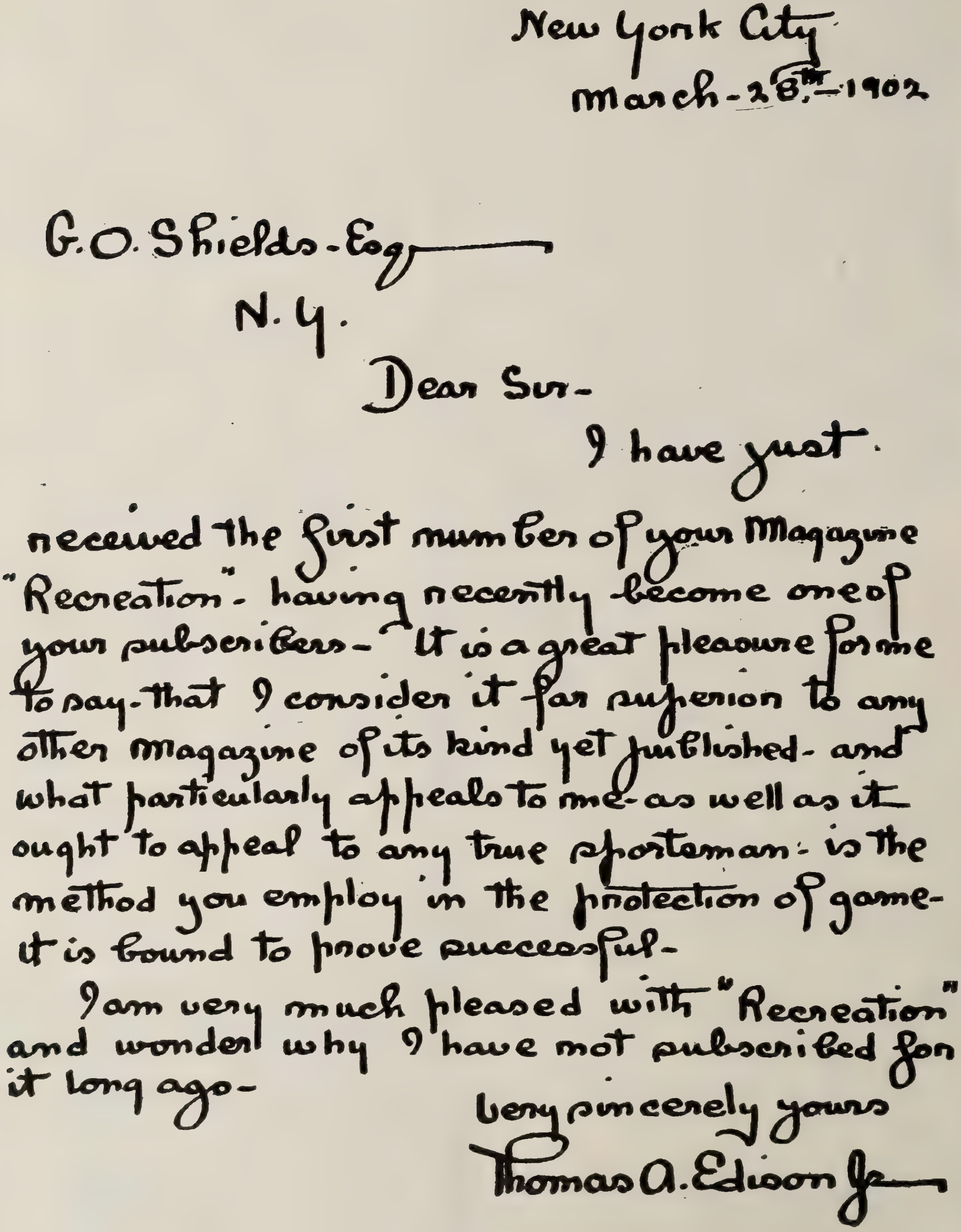
The PRIDE
of our factory
Our famous E39 Rubber-Tired Buggy, direct to you, for
$60.00

Painting and striping to suit your ideas

Why not buy direct from the makers? We own and operate one of the best equipped vehicle factories in the country, and will sell to you at manufacturers' prices. THIS BUGGY is one of the best we build—it's high-grade throughout. Every workman in our factory takes a certain amount of pride in this rig. YOU WILL TOO. Catalog free. Write today.

We make 12,000 vehicles annually and ship direct to users.

MONTGOMERY WARD & CO., CHICAGO



New York City
March-28th-1902

G. O. Shields-Esq
N. Y.

Dear Sir-

I have just received the first number of your Magazine "Recreation"- having recently become one of your subscribers- It is a great pleasure for me to say-that I consider it far superior to any other magazine of its kind yet published- and what particularly appeals to me-as well as it ought to appeal to any true sportsman- is the method you employ in the protection of game- it is bound to prove successful-

I am very much pleased with "Recreation" and wonder why I have not subscribed for it long ago-

Very sincerely yours
Thomas A. Edison Jr

THE
WORLDS
STANDARD

THEY'RE MADE TO MEASURE

Putman Boots.

Go on like a glove *and* fit all over.

For a **Quarter of a Century** Putman Boots have been the Standard among Western Hunters, Prospectors, Ranchmen and Engineers (who demand the best) and we have learned through our personal contact with them **how** to make a perfect boot.

Putman Boots are in use in nearly every civilized country in the World. They are Genuine Hand Sewed, Water Proof, Made to Measure, Delivery charges prepaid, and cost no more than others. Send for Catalogue of over **30 different styles** of boots. Also **Indian Tanned Moosehide Moccasins**.

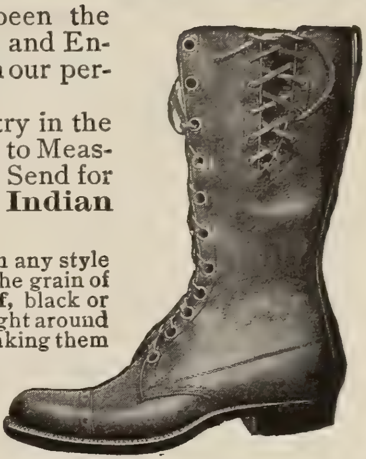


Illustration shows **No. 900,** 14 inches high, Bellows Tongue, Made on any style toe desired, Uppers are Special Chrome Tanned Calf Skin, tanned with the grain of the hide left on; (Our Special Tannage) making the leather **water proof,** black or brown color, large eyelets and wide leather laces, laced at side to fit boot tight around top, sole, light, medium or heavy. The soles are Genuine Hand Sewed, (making them soft and easy) and made of the best Water Proof Oak Sole Leather.

Made to measure and delivered in the U. S., Canada or Mexico for **$7.50**

H. J. PUTMAN & CO.

36 HENNEPIN AVE. MINNEAPOLIS, MINN.

Send for Order Blank showing how to measure your Foot.

CONLEY'S COMBINATION HUNTING COAT AND VEST.

The Most Useful Coat to Sportsmen

It is made of the best 8-oz. plain and rubberized duck of dead grass color, and is absolutely waterproof.

Order direct from the factory. The hunter is our only agent.

Rubberized, - $5.00
Uurubberized - 4.50

You can use it for a long rain coat, a duck blind or sleeping bag. You can save yourself from dampness and cold, which costs money in the end. It will last a lifetime.

Enclose stamp for booklet.

Mention RECREATION.

CONLEY MFG. CO., St. Joseph, Mo.

HISTORY AS SHE IS WROTE.

Here are some curious historical facts and startling results selected from British schoolboys' examination papers:

Of whom was it said "He never smiled again?" William Rufus did this after he was shot by the arrow.

My favorite character in English history is Henry VIII., because he had eight wives and killed them all.

Edward III. would have been king of France if his mother had been a man.

Alexander the Great was born in absence of his parents.

What followed the murder of Beckett? Henry II. received whacks with a birch.

The principal products of Kent are Archbishops of Canterbury.

The chief clause in Magna Charta was that no free man should be put to death or imprisoned without his own consent.

Where were the kings of England crowned? On their heads.

What were the three most important Feudal dues? Friendship, courtship, marriage.

What do you know of Dryden and Buckingham? Dryden and Buckingham were at first friends, but soon became contemporaries.

What is Milton's chief work? Milton wrote a sensible poem called the "Canterbury Tails."

Give the names of five Shakespearean plays? Macbeth, Mikado, Quo Vadis, San Toy, Sign of the Cross.

An optimist is a man who looks after your eyes, and a pessimist is a man who looks after your feet.

A man who looks on the bright side of things is called an optionist, and the one who looks on the dull side is called a pianist.—St. James Gazette.

Have used a Parker hammerless, $50 list, 3 years. After shooting it at least 1,000 times in the field and at the traps, it is to-day as tight and works as well as when the first shot was fired. Have used Greener, Riley, Winchester and Remington, but can do better with my Parker. My gun's weight is 7-10; gauge, 12; length of barrel, 28 inches; length of shell, 2⅞ inches. With 40 grains DuPont smokeless, 1⅛ ounce No. 7 chilled shot, I can place with the right hand barrel 62 per cent. and with the left hand barrel 73 per cent. in a 30 inch circle at 40 yards. For a cheap all around gun I think the Parker can not be beaten.

R. M. VanWyck, Fishkill Plains, N. Y.

EXCESSIVE GROWTH OF HAIR STOPPED.

Removed instantaneously by new, safe remedy. Guaranteed not to injure the skin. Sent on receipt of $1.00.

MRS. G. J. WILSON, P. O. BOX 444, N. Y.

Mention RECREATION.

Most of the men who read RECREATION read every word of the advertisements that appeal to their interests or hobby. I have come to the conclusion that I shall buy my sporting goods of firms that give your magazine their support. It is strange to me that such firms as Colt and Parker do not advertise in RECREATION.

S. L. Warner, Lanesville, Conn.

RECREATION certainly fills the bill in every respect. I am no active sportsman and would rather go hunting with a camera than with a gun, but I am decidedly in favor of this League of American Sportsmen Burness Moyer, Hartford, Conn.

Enclosed is $1 in renewal of my subscription to RECREATION, which I consider the only *bona fide* sportsmen's magazine published, and which I should consider it a hardship to do without.

F. G. Dodd, Zanesville, O.

I have read a good many sportsmen's journals, but RECREATION is the best of all. Any sportsman without RECREATION is 25 years behind the times.

Geo. W. W. Rohletter, Columbus, O.

RECREATION is the best magazine of its kind published. It is the only ideal sportsmen's best friend, and is a sure cure for the blues.

Sandy Griffith, Colona, Ill.

RECREATION is the best sportsmen's and all around magazine published in the United States.

C. B. Wagner, Gates, N. Y.

I join your army of readers in saying RECREATION is the best magazine of its kind ever published. Thos. Slotten, Wahpeton, N. Dak.

I must reach the sportsmen, and your magazine is the only one that will pay the advertiser 100 cents on the dollar.

A. H. Crandall, Chicago, Ill.

Your magazine surpasses anything I ever saw yet for its information to sportsmen. Jesse Mason, Paola, Kans.

RECREATION is the greatest sportsmen's magazine existing.

W. G. Williams, Plainfield, N. J.

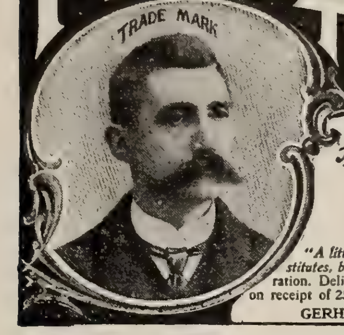
RECREATION is the best and most valuable piece of literature I ever saw.

R. H. Brown, Freemont, O.

I would not be without RECREATION for twice the price.

John Sullivan, Sanitaria Springs, N. Y.

No sportsman can do without RECREATION. G. B. Pettingill, Newburyport, Mass.



MENNEN'S BORATED TALCUM
TOILET POWDER

A Positive Relief For
PRICKLY HEAT,
CHAFING, and
SUNBURN, AND ALL AFFLICTIONS OF THE SKIN.

"A little higher in price, perhaps, than worthless substitutes, but a reason for it." Removes all odor of perspiration. Delightful after Shaving. Sold everywhere, or mailed on receipt of 25c. Get Mennen's (the original). *Sample Free.*

GERHARD MENNEN CO., Newark, N. J.

FREE BOOK, WEAK MEN

My illustrated nature book on losses, varicocele, impotency, lame back, free, sealed, by mail. Much valuable advice and describes the new DR. SANDEN HERCULEX ELECTRIC BELT. Worn nights. No drugs. Currents soothing. Used by women also for rheumatic pains, etc. 5,000 cures 1901. Established 30 years. Advice free.

Dr. G. B. SANDEN, 1155 Broadway, New York

Corns Cured Free

ALLEN'S ANTISEPTIC CORN PLASTER *cures corns.* To prove it I will mail *free plaster* to any one. Send name and address—no money.

GEORGE M. DORRANCE, 221 Fulton St., Dept. N, New York

Spring & Summer

24 Years the
Standard of Excellence

Jaeger **Porous** **Woolens**

Only True
Sanitary Underwear

SPECIAL LIGHT WEIGHTS FOR SUMMER.

ILLUSTRATED CATALOGUE FREE

NEW YORK: 16 West 23d Street, 155-157 Broadway
BROOKLYN: 504 Fulton Street
BOSTON: 230-232 Boylston Street
PHILADELPHIA: 924 Chestnut Street
CHICAGO: 82 State Street

Agents in all Principal Cities.

Dr. Delmer D. Richardson's *Announcement with reference to* Varicocele *and* its Cure

Delmer D. Richardson, M. D.

LAST month, Dr. Delmer D. Richardson, made the following statement as to his ability to cure Varicocele: "*So confident am I that I can cure every case I undertake that I do not permit my patient to assume any risk at all. I do not want a dollar of any man's money until I have given value received and more. When you leave my home, you leave it a cured man and that's when I want my money.*" In explanation of his action Dr. Richardson says:

"There are so many unscrupulous practitioners who mislead sick people by so-called guarantees that are hedged about with conditions which make them of no effect, that I decided to safeguard the interests of my patients absolutely. I understand the disease of Varicocele and its reflex effects upon the nervous system. I have never failed to effect a cure in any of the thousands of cases that have been under my professional care. I have a splendid Sanitarium equipped with every convenience and facility that modern science could suggest to aid me in my work, and I have perfect confidence in my own skill. Why should I hesitate, if I undertake the cure of a case, no matter how difficult and complicated, to assume the risk as to satisfactory results? I believe this is the right principle, and I propose to adhere to it throughout my entire professional career."

DO NOT WEAR A SUSPENSORY
THROW IT AWAY

DR. RICHARDSON'S most important monographs and lectures in book form, and his professional opinion will be sent free if you describe your case carefully. Direct your request to

DELMER D. RICHARDSON, M.D.
119 MICHIGAN AVENUE, CHICAGO

SOME RARE OPPORTUNITIES

These goods are all new, and will be shipped direct from factory. Prices named are those at which manufacturers and dealers usually sell. Here is a good chance to get

A Book, a Gun, a Camera
A Sleeping Bag, a Fishing Rod
A Reel, a Tent,
FREE OF COST

Subscriptions need not all be sent at once. They may be sent in instalments as taken and credit will be given on account. When the required number is obtained the premium earned will be shipped.

These Offers are subject to change without notice.

TO ANY PERSON SENDING ME

TWO yearly subscriptions to RECREATION at $1 each, I will send a copy of *Hunting in the Great West*, cloth; or a Zar Camera, listed at $1; or an Ingersoll Watch or Cyclometer, listed at $1; or a Recreation Waterproof Match Box, made by W. L. Marble and listed at $1; or a Shakespeare Revolution Bait listed at 75 cents; or a Laughlin Fountain Pen; or a Cartridge Belt listed at $2; or a dozen Trout Flies, assorted, listed at $1; or a Stonebridge Folding Aluminum Lantern, listing at $1.50.

THREE subscriptions at $1 each, a copy of *The Battle of the Big Hole*, cloth; or a safety pocket ax, made by W. L. Marble and listed at $2.50; or a dozen Bass Flies, assorted, listed at $2; or 4 dozen Carbutt plates, 4x5 or 5x7.

FOUR subscriptions at $1 each, a copy of *Camping and Camp Outfits*, cloth; or a Primus Oil Stove, listed at $4; or an Ideal Hunting Knife, made by W. L. Marble and listed at $2.50; or a .32 caliber Automatic Forehand Revolver, made by the Hopkins & Allen Arms Co.; or a Gold Mounted Fountain Pen.

FIVE subscriptions at $1 each, a copy of *Cruisings in the Cascades*, cloth; or a set of Nehring's Convertible Ampliscopes, listed at $5.00; or an Ideal Hunting Knife made by W. L. Marble, and listed at $3; or a polished Buffalo Horn Gun Rack, made by E. W. Stiles.

SIX subscriptions at $1 each, a Hawkeye Refrigerating Basket made by the Burlington Basket Co.

SEVEN subscriptions at $1 each, a copy of *The Big Game of North America*, or of *The American Book of the Dog*, cloth.

EIGHT subscriptions at $1 each, a 4 x 5 Weno Hawk-Eye Camera, made by the Blair Camera Co., and listed at $8.

NINE subscriptions at $1 each, an Acme single shot gun, made by the Davenport Arms Co., and listed at $8.

TEN subscriptions at $1 each, a Cut-Glass Salad Bowl, made by Higgins & Seiter, and listed at $4.50; or a Conley Combination Hunting Coat, listed at $8; or a Yawman & Erbe Automatic Reel, listed at $6 to $9; or a pair of horse hide Hunting Boots, made by T. H. Guthrie, Newark, N. J., and listed at $10; or a Bristol Steel Fishing Rod, listed at $6 or less; or a Single Barrel Shot Gun made by Harrington & Richardson Arms Co.; or a Waterproof Wall Tent 7 x 7, made by D. T. Abercrombie & Co., and listed at $8; or a canvas hunting coat, made by H. J. Upthegrove & Son, listed at $8.

TWELVE subscriptions at $1 each, a Peabody Carbine valued at $12; or a No. 5 Sidle Telescope Rifle Sight, listed at $18; or a Davenport Ejector Gun, listed at $10.

FIFTEEN subscriptions at $1 each, a Shakespeare Reel, Silver Plated, listed at $15; or a set of rabbit plates made by Higgins & Seiter, and listed at $8.

TWENTY subscriptions at $1 each, a 14-karat Gold Hunting-case Watch, with Waltham Movement, listed at $20; or a Repeating Rifle, listed at $16 or less; or an Elita single shot gun, made by the Davenport Arms Co., and listed at $18.

TWENTY-FIVE subscriptions at $1 each, a Shattuck double hammerless gun, listed at $25; or a 11-foot King Folding Canvas Boat, listed at $38; or a Repeating Rifle, listed at $20 or less; or a 4x5 Planatic lens, made by the Rochester Lens Co., and listed at $25.

THIRTY subscriptions at $1 each, a Field Glass, made by C. P. Goerz; or a Repeating Rifle, listed at $25 or less; or a Waterproof Tent, 14½x17, made by D. T. Abercrombie & Co., and listed at $25; or a corduroy hunting suit, made by H. J. Upthegrove & Son, including coat, vest, trousers, and hat, listed at $23.75.

THIRTY-FIVE subscriptions at $1 each, a 14-foot King Folding Canvas boat, listed at $48; or a Grade O, Syracuse Gun, made by the Syracuse Arms Co., and listed at $30.

FORTY subscriptions at $1 each, a Savage .303 Repeating Rifle; or a Mullins Duck Boat, listed at $20; or a No. 10 Gun Cabinet, made by the West End Furniture Co., and listed at $32.

FORTY-FIVE subscriptions at $1 each, a Royal Anastigmat Lens, 4x5, series I, made by Rochester Lens Co., and listed at $45.

FIFTY subscriptions at $1 each, a No. 20 Gun Cabinet, made by the West End Furniture Co., and listed at $38.

SIXTY subscriptions at $1 each, an Ithaca, Quality No. 1, plain, double barrel, hammerless breech loading Shot Gun, listed at $40.

ONE HUNDRED subscriptions at $1 each, a high grade Wilkesbarre Shot Gun, with Damascus barrels, listed at $125.

TWO HUNDRED subscriptions at $1 each, a strictly first class upright piano, listed at $750.

Address,

Recreation 23 West 24th Street
New York

Harmony and Health

Health is the reflection of Harmonious Nature. Disease is Discord and Unnatural. Health depends upon Natural Food.

SHREDDED WHOLE WHEAT BISCUIT

is a Naturally Organized Food, that is, contains all the Properties in Correct proportion necessary to Nourish every Element of the human body.

Nature has stored in the whole wheat complete nourishment for the harmonious building of man, and **Shredded Whole Wheat Biscuit** presents it in the most digestible and appetizing form. If valuable qualities are removed from the wheat, as in white flour, the result is food stripped of the properties which produce teeth, bone, muscle and brain. "Soft cooked" cereals are swallowed with little or no mastication and, therefore, the teeth are robbed of their necessary—*natural*—exercise, causing weakness and decay. **Shredded Whole Wheat Biscuit** being crisp, compels vigorous mastication and induces the *natural* flow of saliva which is indispensable in *natural* digestion.

SOLD BY ALL GROCERS. Send for "The Vital Question" Cook Book (free). Address

THE NATURAL FOOD COMPANY, Niagara Falls, N. Y.

THE CLUB COCKTAILS
The Club
TRADE MARK
MANHATTAN
MANHATTAN Cocktails
Prepared & Bottled by
G. F. Heublein & Bro.

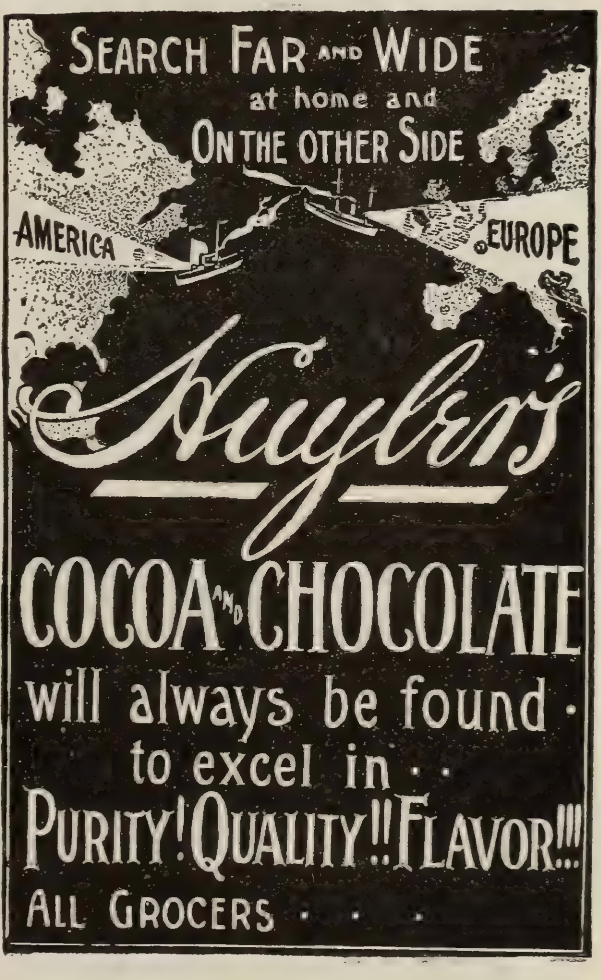
Club Cocktails

Famous the world over for purity. They never vary. The secret of their perfect blend is that they are kept six months before being drawn off and bottled. Be sure you have them in your camp, on the yacht, and on your outing trips wherever you go. They are ready and require no mixing. Simply pour over cracked ice.

For sale by
all dealers
and Druggists.

G. F. Heublein & Bro.
29 Broadway, N. Y.
and Hartford, Conn.

Mention RECREATION.



SEARCH FAR AND WIDE
at home and
ON THE OTHER SIDE
AMERICA
EUROPE
Huyler's
COCOA AND CHOCOLATE
will always be found
to excel in
PURITY! QUALITY!! FLAVOR!!!
ALL GROCERS

MORE PLEASURE LESS PEDALING

300,000!

Safe, Satisfied Riders

last year. Safe, because their wheels were fitted with the **Morrow Coaster Brake**. Wheel always under control. Satisfied, because the **Morrow Coaster Brake** did just what we claimed it would—"Ride fifty miles, but pedal only thirty-five miles."

Morrow COASTER BRAKE

fits any bicycle. Adds one hundred per cent. to the pleasure of cycling. Sold by all dealers. Have your new twentieth century bicycle fitted with it, or put it on your old wheel. Guaranteed to give satisfaction. Sold by all bicycle dealers. If your dealer can not supply you, write us. **Price, $4.50.** Booklet all about it free.

Eclipse Mfg. Co., Dept. N, Elmira, N.Y.

THE C. F. WYCKOFF CO. ITHACA, N.Y.

"Nothing so Rare as Resting on Air."

No Other Bed,

anywhere, at any price, can compare with the

DEFLATED AND ROLLED UP.

A mattress 75x21 in. makes a bundle 7x14 in. and weighs 9 lbs.

Pneumatic Mattress

Most comfortable a man ever slept on. Lightest in existence. Strong, durable, guaranteed. At a fair price of all sporting goods dealers.

ASK FOR 1902 PRICE LIST

Pneumatic Mattress and Cushion Co.
4th Floor
35 Broadway, New York City

THIS IS A JOSH.

The letters in the gun and ammunition department contain much valuable information for sportsmen, but I can not subscribe to their praise of the 30-30s, 30-40s, and .303. I was beguiled into buying a 30-40 and my partner has a .303 British, but I would not give my old 44-40 Winchester for either of them. I will back it against anything made at the present day. A fellow told me he had seen several 30-40 bullets sent right through a deer endways and she did not seem to mind it a bit. With my 44-40 I killed 4 deer and 3 fawns one day last summer in 9 shots. I think that record can not be beaten by any other rifle. It was an awful hot day, too, and before I had 2 skinned I had to quit as the smell was getting too offensive.

I also possess an 8 bore muzzle loader made many years ago. It is still a good weapon. Last Christmas I saw a number of prairie chickens near my place. I took down the old gun out of curiosity to see how many it could kill. Though all of 70 yards away it dropped 14. Later I found 5 more wounded and I know it hit others, for I could see their legs hanging down as they flew off.

H. B. Spratt, Edmonton, Alta, Can.

IN ANSWERING ADS PLEASE MENTION RECREATION.

Every Sportsman
Every Prospector
Every Surveyor
Every Timber Hunter
Every Explorer

Who goes into the woods or the mountains should carry one of

Marble's Pocket Axes

This is the most convenient and useful tool ever invented for such men.
It is as important as a hunting knife, and almost as much so as a match box. This Ax is

neat, light, safe and effective.

You can do more things with it than with any other one instrument known to the craft.
I have made an arrangement with

W. L. Marble, Gladstone, Mich.
The Maker of this Ax

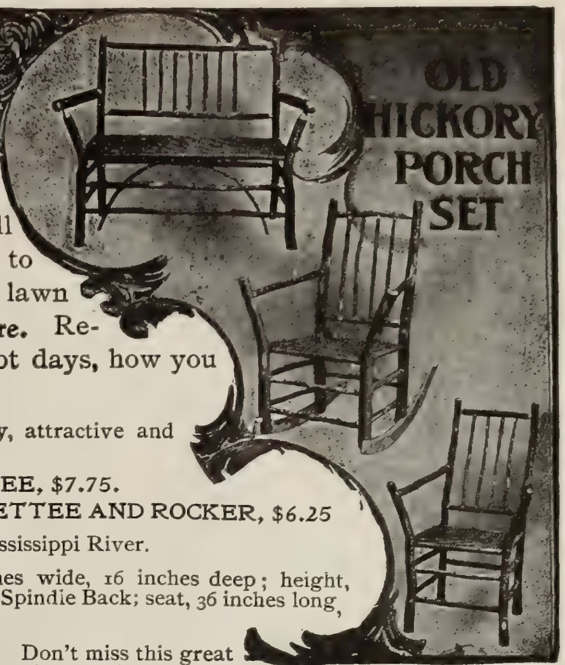
which enables me to offer, for a short time, one of these axes as

A Premium for Three Subscriptions to RECREATION.

This is **Another Great Opportunity**

and should be taken advantage of *at once* by every woodsman who is not already supplied with one of these handy tools.
Sample copies of RECREATION for use in canvassing furnished on application.

GREAT COMBINATION OFFER



HERE is the greatest inducement we have ever offered you. A small sum will now make it possible for you to attractively furnish your veranda and lawn with the celebrated **Old Hickory Furniture.** Remember last summer, during the long, hot days, how you would have enjoyed this set?

All our furniture made entirely of finest hickory, attractive and stylish. The entire set as illustrated—

CHAIR, ROCKER AND SETTEE, $7.75.

CHAIR AND ROCKER, $3.50 SETTEE AND ROCKER, $6.25

Goods delivered free east of Mississippi River.

DESCRIPTION—Chair, Spindle Back; seat 18 inches wide, 16 inches deep; height, over all, 3 ft. 4 in. Rocker same as chair. Settee, Spindle Back; seat, 36 inches long, 16 inches deep; height, over all, 36 inches.

If your dealer will not supply you, send direct to us. Don't miss this great offer. You are welcome to our 48-page illustrated catalogue, showing 125 patterns. Ask for it.

THE OLD HICKORY CHAIR CO.,

449 Cherry Street, MARTINSVILLE, IND.

How is your Muscle?

Would you like to build it up?

How are your Lungs?

Would you like to expand them?

How is your Circulation?

Would you like to improve that?

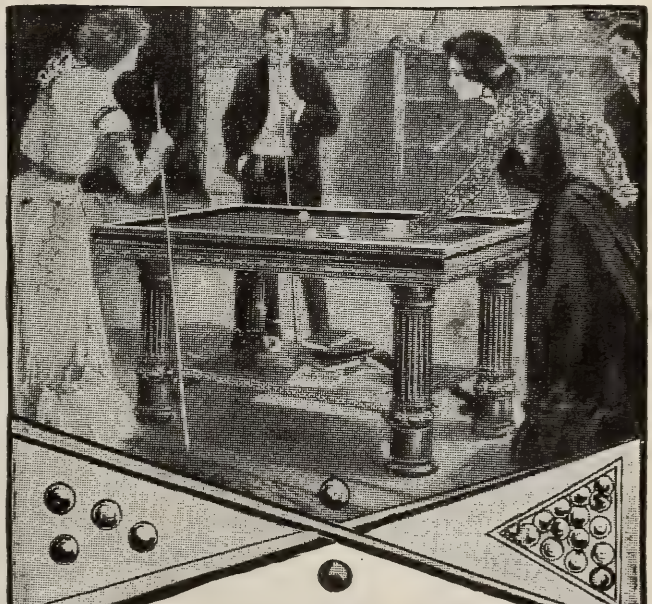
If so, send me 10 yearly subscriptions to RECREATION, accompanied by a money order for $10, and I will send you a new

Professional Punching Bag

made by H. D. CRIPPEN, No. 52 BROADWAY, NEW YORK, and listed at $6.95.

There is a frame with the bag that you can attach to a door casing, a window casing or a wall, or a board fence, or anywhere else you may see fit to put it, and you will thus have a small gymnasium of your own. The Crippen bag is one of the liveliest ever devised, and if you will put 20 minutes a day on it, for a month, you will find a wonderful improvement in your muscle and your health.

Sample copies of RECREATION, for use in canvassing, will be mailed free.



SUMMER BILLIARDS

Have a billiard room in your summer cottage. You need never then experience any difficulty entertaining your friends. Formerly billiards at home was a luxury beyond the means of most people. With our

Indianapolis Combination Table
Library ⩤ Dining ⩤ Billiards ⩤ Pool

everybody can have a billiard room in his summer cottage. It is a massive, beautifully made table, with dining or library top, which, removed, discloses a practical, well constructed billiard and pool table. The playing surface is as good in every way as that of the best standard size tables. Accurate angles, true balls, regulation cues, quick sensitive cushions and beds of superior Vermont slate. It thoroughly serves the purpose of four tables in the best possible manner. Sizes ⅔, ¾, ⅞ standard. Write us for illustrated catalogue of our many styles and designs, with full information, cash prices and our special payment plan.

COMBINATION BILLIARD TABLE CO.

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A TEST OF THE MAUSER.

In a recent number of RECREATION I saw a comparison made between an old 7 m-m Mauser and a new Savage and a new Lee. In that test the Mauser, it seems, was worsted, but the writer admitted that the rifling of the gun was worn badly.

I compared the shooting qualities of the 7 m-m Mauser, the .303 Savage, the 30-40 Winchester and the Lee on one occasion at the same targets and with factory-gauged sights, with these results: At 500 yards, with 5 successive shots, I found the Savage made the best average, with the Winchester close behind and the Lee next. With 5 shots at an 800-yard target the Mauser made a far better average than the others, and at even greater distances was unequaled and accurate. All these rifles were of the latest model, and apparently in the best of condition, and were shot from a rest by the same man.

The kick against the Mauser comes, I think, from the fact that 4 out of 5 of them obtained in this country are in a badly worn condition. A new one will prove its merits at long range.

Another point used as a strong argument for certain rifles is their ability to drop large game "on the spot," as it is generally put. The point seems a question of caliber in the average case. While that may have some influence, it is more a question of velocity and position. The caliber is a secondary factor at best. If a grizzly is hit between the ear and eye with sufficient force to enter the cranial cavity, he will drop just as quickly for a 22-caliber revolver as for a Savage or a Mauser rifle. If he is hit in the abdomen neither will drop him. But there are portions of an animal's body where the bullet will paralyze the muscles used in locomotion and the animal will drop. Now while a large caliber rifle involves a greater destruction of tissue, it has been shown that the greater velocity of the small bore causes the greater shock.

As to shot guns, I am unprejudiced, although I shoot a hammerless Remington. I think a gun can best be judged by its performance at the trap, both as to pattern and mechanism, if not as to penetration. The trap shooter uses the best gun he can find for strong shooting, mechanism and pattern, and most trap shooters use Parker guns. The Greener has probably the best mechanism of any gun made, but to obtain one you have to reach deep in your pocket. It is for that reason they are not better known in America. The following are some of our best guns: Daly, Parker, Remington and Winchester repeater.

H. R. Biggar, Burlington, Vt.

IF YOU WOULD LIVE NEXT TO NATURE, READ RECREATION.

A PISTOL AND A DEER.

In my experience of 28 years among the pines of the upper peninsula of Michigan I have discovered that the caliber does not make much difference if the rifle is held right. I have usually shot Winchesters, for they are reliable and close, hard shooters. The past 3 years I have used a 30-30 with soft nosed cartridge. Have had excellent success with it, not losing a deer fired at, and few of them ran more than 20 rods.

With Chas. T. Kruse and Paul D. Swift I was hunting deer at my camp 18 miles South of Ishpeming. I had killed a fine 8-pronged buck with my 30-30 and bled him, and was on the way back from camp to which I had gone for a rope to drag my game across a frozen lake. I had with me a light ax and a Stevens target pistol which I was in the habit of carrying to shoot grouse. As I neared the spot where the buck was lying I heard something walking on the snow crust in thicker woods on my right. Soon a spike buck came in view about 30 yards distant. The Stevens was loaded with a long rifle cartridge. I aimed between the eyes as he stood facing me, and pulled. The deer bounded up and came down in his tracks. I bled him and there were 2 deer to transport across the lake. Of course some of the big caliber fellows will want to know why I didn't use the ax instead of the Stevens, but I have seen deer missed with big guns at even shorter range. Iron Ore, Ishpeming, Mich.

I see in RECREATION a statement that 23 hunters were killed in the Adirondacks and in Maine, and that someone wishes a bullet-proof armor for hunters. Mr. Stonebridge seems to have discovered the right thing, as he says he killed a moose and found several 30 caliber bullets sticking in its hide. If those 23 men had only worn moose hide coats or shirts what a lot of suffering it would have prevented. Mr. Stonebridge ought to make moose hide coats and get the army to adopt them. Yes, and even the navy, for if one moose hide will withstand a ball fired from the modern 30 caliber rifle, 7 or 8 ought to be sufficient to withstand a projectile from the modern battleship. However, judging from my experience with the 30 caliber rifle those bullets must have gone through perhaps one moose and fallen to the ground and that other moose came along and happened to lie down on them and they stuck to his hide.

James Clemens, Nemo, S. Dak.

Aunt: Well, Ethel, how do you like your new little brother?

Ethel (aged 4): I don't like him at all. He can't even speak English.—Pittsburg Bulletin.

The NOBLE NEPIGON.

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ROBERT KERR, Passenger Traffic Manager, Montreal.

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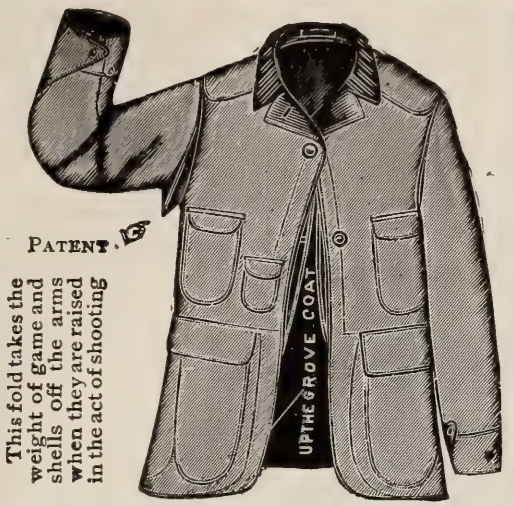
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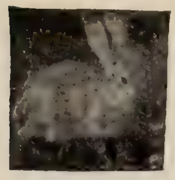

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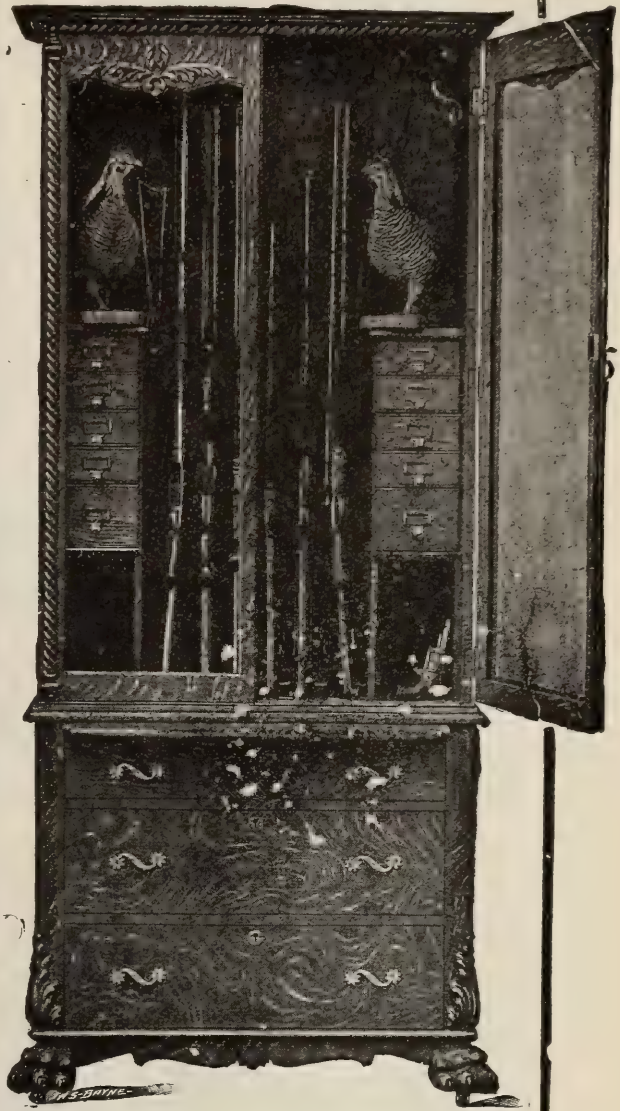

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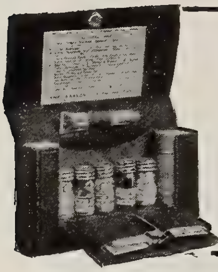

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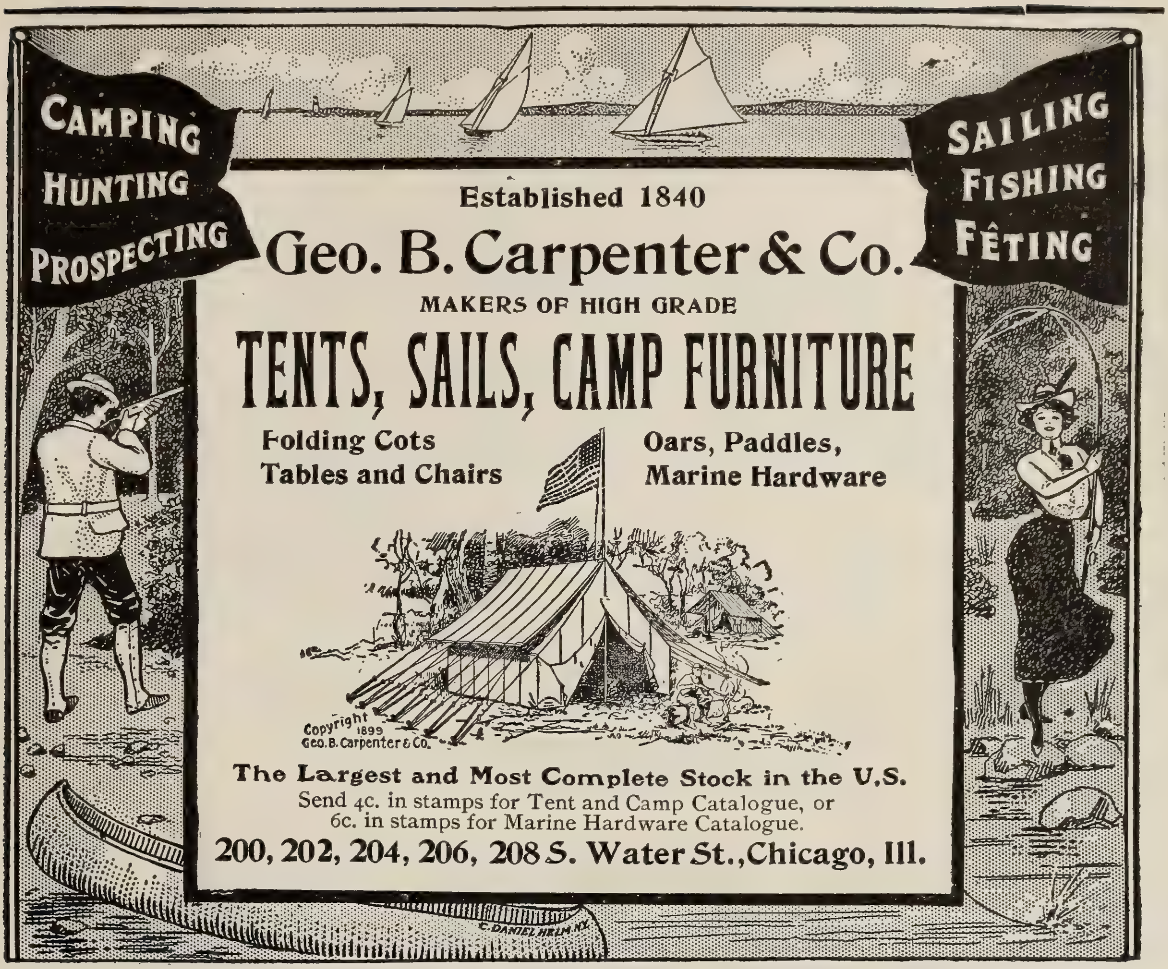
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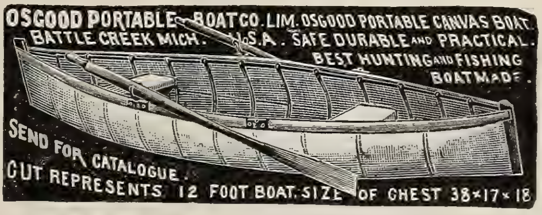
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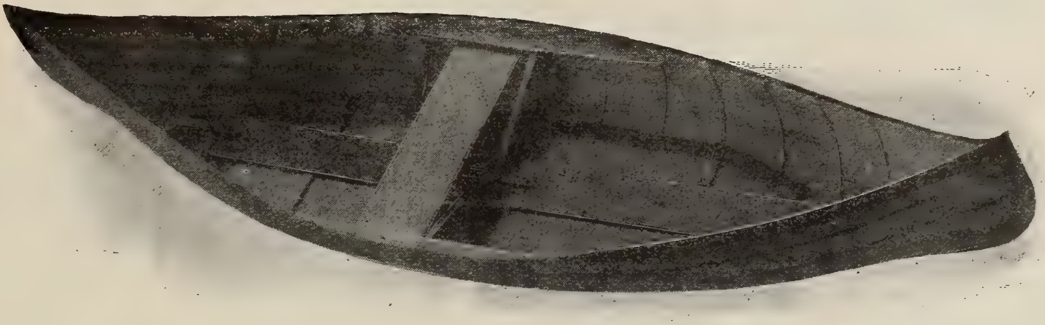

11-foot Regular

The special weave canvas which we use is 20-oz. weight, but woven from a cord similar to sail twine, and made water-tight before water-proofing. In one inch square of canvas there is no less than 80 strands of twine, so that in striking the canvas with an 1⅛ inch hammer face you are attempting to break 100 strands of sail twine, which you can readily understand is impossible, particularly so when this canvas is drawn over the elastic steel frame of the King boat which has great cushioning qualities, rebounding from any obstruction, making a very superior boat for swift water containing dangerous obstructions, qualities possessed by **no other boat of any kind.**

King Folding Canvas Boat Co.
KALAMAZOO, Mich., U.S.A.

Send 6 cents for catalogue of 60 engravings and 250 testimonials.

11-foot Special

Safety, Speed and Comfort in using the

Alco-Vapor Launch

No naphtha or gasoline used. Kerosene oil for fuel. No sparking device used. ***No heavy fly-wheel or reversing propeller blade. The highest of high-grade Launches.***

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Marine Engine & Machine Co., Box 50, Harrison, N. J.

THE Tuttle GASOLINE ENGINES & LAUNCHES

WITH PATENTED SELF CLEANING IGNITER

The Simplest, the Safest, the Cheapest, the Best. Send for Illustrated Catalogue—FREE.

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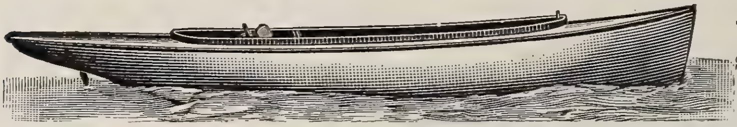
Launch on Exhibition at 523 Broadway, N. Y.



Pierce Vapor Launches

Safe, Reliable Open and Cabin Launches

SIEGEL, COOPER & Co., N. Y., Eastern Representatives

Send for Catalog. Mention RECREATION.

PIERCE ENGINE CO., Box 6, RACINE, WIS.

THE VIKING Folding Canvas Boat

PATENTED

Used for Hunting, Fishing, Pleasure and as Yacht Tenders. Absolutely as strong and safe as a wooden boat. Quickly set up and taken down. Folds into a small package. Has improvements not on any other make of Canvas Boat. Our Catalogue with full description and testimonials free.

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Wanted: Practical, intelligent, industrious farmer, to take charge of small farm. Address S. G., care of RECREATION.

For Sale: 80,000 acres of marsh and forest land in North Carolina; bountifully stocked with deer, bear, quails, turkeys, and, in season, ducks, geese, brant and swans. 31,000,000 feet of good standing timber. The State has spent $17,600 in draining this land. The tract includes many good fishing waters. Hundreds of head of wild cattle range this tract which are more gamy and more dangerous than the buffalo of the West ever were. One of the finest game preserves east of the Rocky Mountains. An effort is being made to organize a syndicate to buy this tract. If interested, address S. G., care RECREATION.

Free: I will print 50 visiting cards for any one who will send me a subscription to RECREATION, accompanied by $1. Send stamp for sample card.
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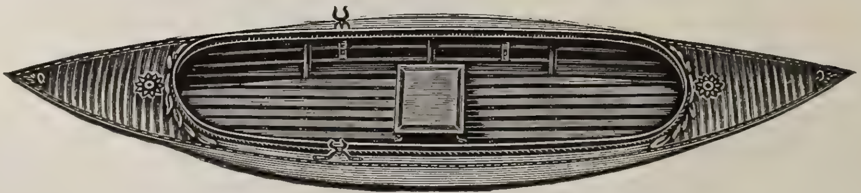
West 184th St. & Broadway, New York.

Mullins' Galvanized Sheet Steel Boats

AND INDIAN CANOES

Low in Price



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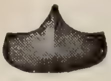
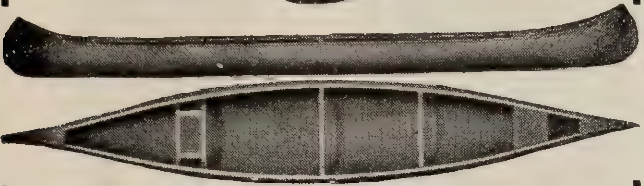
W. H. MULLINS, - - 228 Depot Street, SALEM, OHIO

“Rushton” Stamped on the Stem-band

STANDS FOR THE “BEST IN BOATS”
STANDS FOR “CANOE QUALITY”

“INDIAN”  MODEL



Length, 15 ft.; beam, 32 ins.; depth at centre, 12 ins. Oak, cedar and cherry frame, canvas covered; weight, 56 to 66 lbs. Grade A, $38 to $40. Grade B, $30 to $32.

“PADDLE YOUR OWN CANOE”

You will never know the *real* pleasure and benefit of canoeing until you own a Rushton canoe. The finest workmanship and 28 years' expert experience goes into every one of them. My boats are not made for show merely, though quite as much attention is given the model as the material. The finest air-seasoned Michigan White Cedar is employed in the making of every Rushton shell, because it is so far superior to any other wood as to discourage comparison. I also make a specialty of Canvas Covered Cedar Canoes.

“Light as a feather, strong as steel,
Sound and fine from rail to keel.”

Don't Make up Your Mind to buy a canoe until you have seen a Rushton. You can get a good idea of the excellence of my canoes and boats by sending for my illustrated 80-page booklet, with descriptions and prices of all my wood Rowboats, Dinghies, Sailboats, Sailing and Paddling Canoes, Sails, Paddles, Oars, Rowlocks and other boat-fittings.

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THE RECREATION LAUNCH

Excels all others in grace, beauty of design and finish, in simplicity of operation and thoroughness of construction, in first cost and future maintenance.

The Recreation Girl

delights in its safety, security, and sure-to-go qualities. There is in it those features so essential in a satisfactory pleasure craft.

Send ten cents to cover mailing cost of complete Launch and Marine Engine Catalogue “L.”

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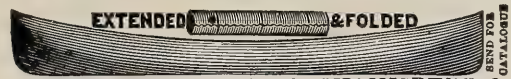

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Send for catalogue of our full line of Folding Canvas Boats and Canoes, which have been adopted by Governments of United States, Canada and England. Just filled an order for U. S. Government who prefer our boats. Received medal and award at Chicago World's Fair. If you investigate we will get your order. Mention RECREATION.

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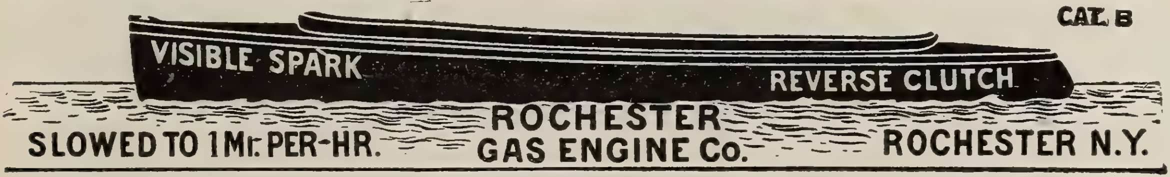

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Eggs Free: To all who send me 3 yearly subscriptions to RECREATION, at $1 each, I will send one sitting of barred Plymouth rock eggs. America's best strains. Chas. Knisely, Prairie Depot. Ohio.

We make everything, from a 16 ft. launch to a cruiser, and each the best of its kind. “The 16-footer,” the biggest, safest, handsomest, completest of its size, and a half to three-fourths mile faster per hour. Our FREE illustrated catalogue tells all about it—good summer reading. Send for it now.
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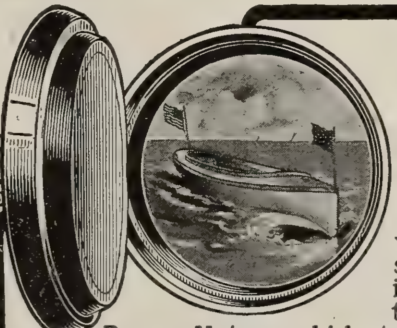

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Fay & Bowen Launches are the very finest in construction and finish; equipped with the famous Fay & Bowen Motors, which start when started, and run until you stop them. No crank or handle. A perfect and unique Ignitor. Motors from 1½ to 25 H. P. Send for catalogue.

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Fly Rods.
THE FRED D. DIVINE CO.,
76 State Street,
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A DivineRod

IS THE APPLE OF AN ANGLER'S EYE

Hand-made from the toughest wood and finest bamboo; they are superior to all others. Cost a little more, perhaps, but are not so expensive as cheap rods that break with little use. A true sportsman is never quite satisfied with anything short of the best. Send for catalog.

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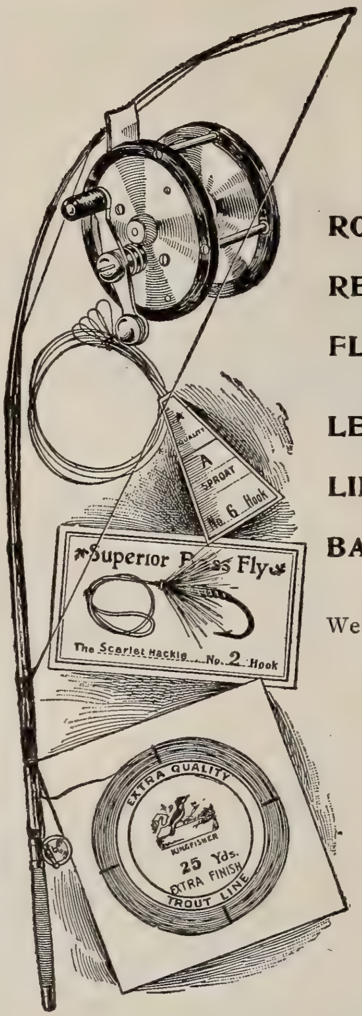
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No. 6 Hook
Superior Bass Fly
The Scarlet Hackle No. 2 Hook
EXTRA QUALITY
KINGFISHER
25 Yds.
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From 75c. to $25.00

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Our Gut Helper, 72c. doz.

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All Sizes.

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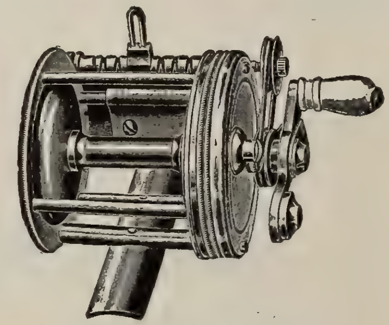
WHO ever heard the like? A high-grade even-spooling Reel for $5.50, postpaid. An 80 yd. quadruple, ivory handle, hardened steel bearings, click and drag, nickel plated, free running; made to last a lifetime if kept clean and oiled. The even spooling device takes entire care of line; works perfect. For casting and all kinds of fishing it has no superior. Even spoolers have always cost not less than $15.00. Ours are all that a millionaire expert can desire, and in reach of the poor fisherman's pocket. Better order now, not wait until the banking, bunching or fingering begins. If on inspection it is not as represented, send it back and we will return your money without a murmur.



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Mention RECREATION. **Racine, Wis.**

No other reel will give satisfaction after you have seen

THE "TALBOT" REEL

A thing more perfect was never wrought in metal. In Tournaments always a victor; among the Fishermen's treasures, the chief. Send for Booklet "D."

W. H. TALBOT, Nevada. Mo.

Yes!

we know all about those big fish stories! Everybody tells them, and, of course, most of them are true. But you stand a lot better show of being able to tell a good story when you return from your fishing trip, if you will outfit properly for it.

You can

get your whole camping outfit, your cooking outfit, your clothing, your compressed foods at low rates, if you will come to us.

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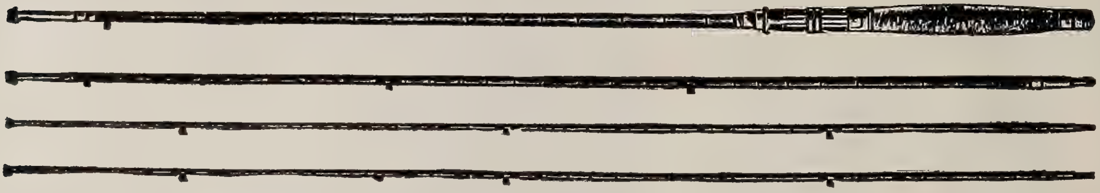
Small Profits—Quick Sales.

TROUT FLIES
for trial—send us

15c for an assorted sample doz. Regular price, 24 cents. **Quality A Flies**
30c for an assorted sample doz. Regular price, 60 cents. **Quality B Flies**
60c for an assorted sample doz. Regular price, 84 cents. **Quality C Flies**
60c for an assorted dozen, Regular price 84 cents. **Bass Flies**



SPLIT BAMBOO RODS

Fly Rods 10 feet, 6 ounces **70 cts.** **Bait Rods** 9 feet, 8 ounces

3 piece and extra tip, cork grip, in wood form

Try our new **Braided Silk Enameled Waterproof METAL CENTER LINE**

Size No. 5, 4½ cents per yard. Size No. 4, 5½ cents per yard. Put up in 10-yard lengths connected.

$200 Tuttle Launches Are the Winners

15 MILES IN TWO HOURS. LAUNCH ON EXHIBITION IN STORE

Catalogues of any of above goods free on application

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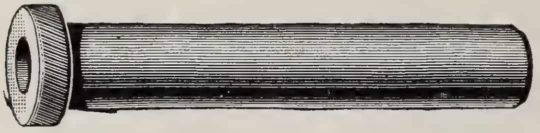
THE Steel Rod Shortener



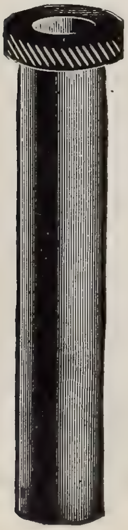
Convert your fly rod into a bait casting or boat rod. Made of brass and nickel plated. Remove the first joint and set the Shortener into the handle and the second joint into the Shortener. Sent, postage paid, 50c.

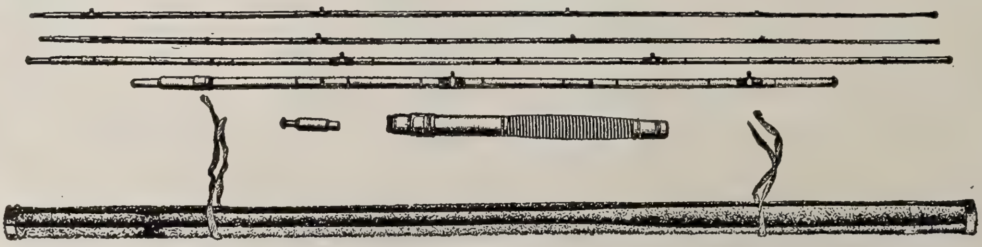
GEO. H. HELMER, 144 Superior St., Cleveland, O.

We are a little cold out here, but RECREATION always finds a warm place on its arrival. The boys who take it are all highly pleased. A. K. Rice, Tekamah, Neb.

Huron Indian Work: To any one subscribing to RECREATION through me I will give a Bracelet and Ring worked in horsehair, with any small inscription you like, your name, etc., woven in it with caribou hair; quite a curiosity. Send along your $1. Walter Legare, 518½ John Street, Quebec, Canada.

Wanted: To communicate with a good business man who would like to engage in sporting goods trade, and who has $2,000, or more to invest in a well established business. Have had 20 years' experience and have a large and permanent trade. Address C. M. W., care of RECREATION.





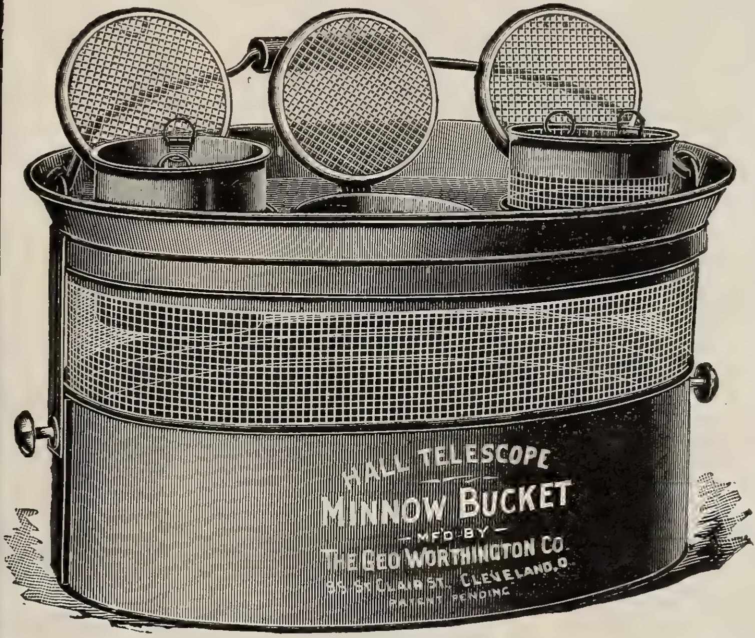
Pat. July 9, 1889. No. 198½. No. 406, 465.

Pepper's Patent Combination Rod is the only perfect combination Rod on the market. This rod can be used for Bass or Fly fishing. By the use of my patent Reducing ferrule the rod may be shortened, making a very fine Casting Rod. In fact, **four rods in one.** I make this rod of Lancewood, Greenheart and Bethabarra. No. 198½ rod is made of Lancewood, price each **$4.00.** I also make my Patent Reducing ferrule to fit steel Rods, price each **50c.** If your dealer does not handle these goods, write us and we will be pleased to furnish you at the above price.

Full directions with each Rod. When writing mention RECREATION. For particulars address

JOHN PEPPER, Sr., ROME, N. Y.

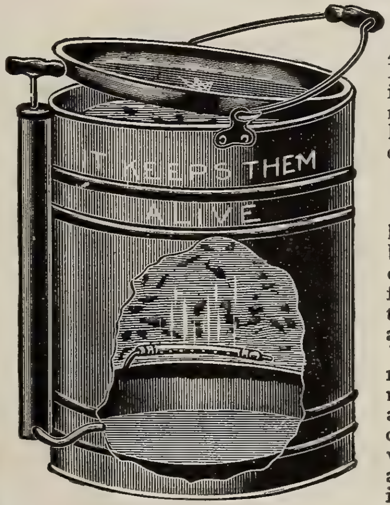
Hall's Telescope Floating Minnow Bucket



Most convenient and compact minnow bucket made. Size reduced one-half when folded for carrying. Made in 3 sizes—the largest, as shown in illustration, has three compartments, which can be used for various kinds of bait as desired. This is a 15-quart bucket, oval in shape, and price is **$4.50.** 12-quart size which is oval and 10-quart which is round, have single compartments only, and sell for **$3.00** and **$2.00.** These buckets are made of best tin, japanned, and of fine mesh wire. It is necessary to sink the bucket only to the level of the float, the wire mesh admits air and fresh water, keeping the bait in fine condition, which is most essential in catching game fish. There is but one **Perfect Minnow Bucket,** and that is **Hall's.** Send order or write for circular to

**The Geo.
Worthington Co.
95 St. Clair St.
CLEVELAND, - OHIO.**

Fisk's Aerating Minnow Pail



☞ The only Minnow Pail in which Minnows can be kept alive indefinitely.

Has an air chamber at the bottom holding 260 cubic inches of condensed air forced in by the Air Pump attached, and by a simple rubber attachment the air is allowed to escape into the water gradually, supplying the fish with the oxygen consumed by them. One pumping is sufficient for ten hours.

Height, 1 foot; diameter, 10 inches; weight, 7½ lbs.; water, 2½ gallons; keeps 50 to 150 minnows, according to their size.

**IT KEEPS THEM ALIVE.
Price, $5 net—Sold direct.**

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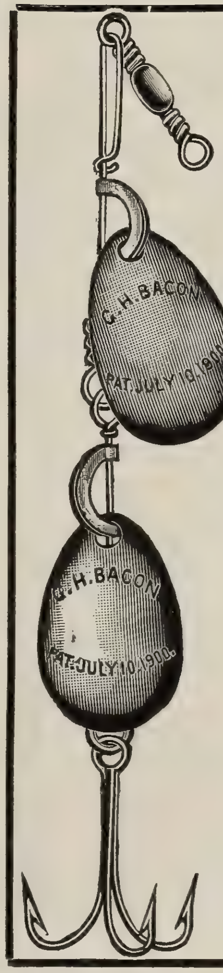
**J. M. KENYON & CO.
Toledo, Ohio, U. S. A.**


G. H. BACON
PAT. JULY 10, 1900.
G. H. BACON
PAT. JULY 10, 1900.

BACON SPOON

Best and **easiest revolving** trolling bait on the market. Was most successful last year for **bass, lake trout, land-locked salmon,** etc.

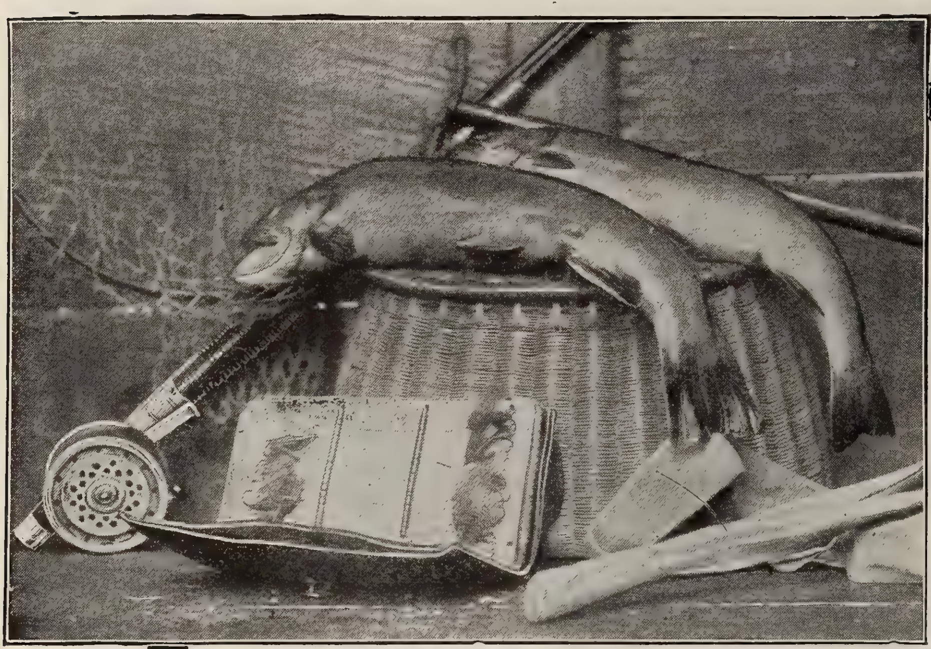
Double spoon furnished in five different combinations of brass, nickle and copper.

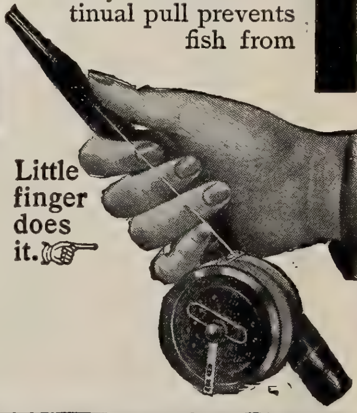
**BN, CN, NN, CC, BB,
Double Spoons, 50c each
Single " 30c "**

Also **Bacon gold plated** or **enameled casting spoons,** with fancy fly, for use with fly rod, **75 cents** each.

Any of above sent on receipt of price.

**Wm. Mills & Son
21 Park Place, N. Y.**





No slack line—

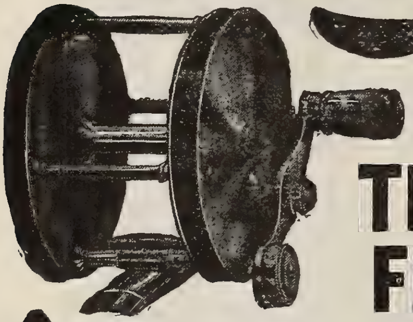
—when fish is hooked, the little finger instantly releases spring, which winds the line automatically. This continual pull prevents fish from dislodging hook from his mouth and in the end will always tire him out. When once hooked, he's your fish. Reel can be made free-running for casting.

"The Automatic Reel did it." (Caught by H. H. Fraser, St. Johns, N. F.)

Little finger does it. ☞

Prizes Ask any sporting goods dealer for Booklet "X" giving full particulars of our great prize offer to fishermen, or send direct to

Yawman & Erbe Mfg. Co., Rochester, N. Y.



ON TRIAL FREE

Shakespeare Reels and Baits.

Wm. Shakespeare, Jr., of Kalamazoo, Mich., "maker of fine reels and baits that catch fish," wants every dealer in the U. S. and Canada to have a personal knowledge of the fine points of the Shakespeare reels and the marvelous attractiveness of the Shakespeare Baits. He will gladly send samples of his reels and baits for examination, express prepaid, to any reliable sporting goods dealer, or dealer who handles a line of fishing tackle, upon receipt of his name and address. After examination, if he does not wish to keep the assortment in stock the dealer may return the tackle to Mr. Shakespeare and he will pay the return charges.

Wm. Shakespeare, Jr., devotes all his time and ability to making fine reels and bait that catch fish. The baits are so successful in attracting and catching the biggest fish and the reels are so beautiful in design, so exquisitely finished and withal so strong and serviceable the angler who is so fortunate as to own one cherishes it as his dearest and most valued possession.

Write to-day to Mr. Shakespeare; ask him to send you samples of reels and baits together with his charming and delightful little books on "How to Catch Bass," "The Fine Points About Tackle" and "The Art of Bait Casting" all of which are free.

WM. SHAKESPEARE, JR.,
180 Shakespeare Bldg., Kalamazoo, Mich.

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Following are names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

If anyone who may employ one of these guides should find him incompetent or unsatisfactory, I will be grateful if he will report the fact to me.

FLORIDA.

Carson Bros., Frostproof, bear, deer, turkeys, quail, snipe.

IDAHO.

John Ching, Kilgore, elk, bear, deer, antelope, mountain sheep, trout and grouse.
R. W. Rock, Lake, ditto
Chas. Pettys, Kilgore, ditto

MAINE.

W. C. Holt, Hanover, moose, caribou, deer, grouse, and trout.
H. R. Horton, Flagstaff, bear, moose, fox, grouse and trout.

MONTANA.

James Blair, Lakeview, elk, bear, deer, trout and grouse.
A. T. Leeds, Darby, ditto
Chas. Marble, Chestnut, ditto

OREGON,

W. H. Boren, Camas Valley, bear, deer, elk, grouse and trout.

WYOMING.

Frank L. Peterson, Jackson, elk, bear, deer, mountain sheep, antelope, grouse and trout.
S. N. Leek, Jackson, ditto
James L. McLaughlin, Valley, elk, bear, deer, mountain sheep, antelope, grouse and trout.
Felix Alston, Irma, ditto

CANADA.

W. A. Brewster, Banff, Rocky Mountain Park, Can., bear, sheep, goats, grouse and trout.
Wm. S. Andrews, Lillooet, B. C., deer, bear, mountain sheep, goats, grouse and trout.
B. Norrad, Boieztown, B. C., moose, caribou, grouse and trout.

"The Bristol"

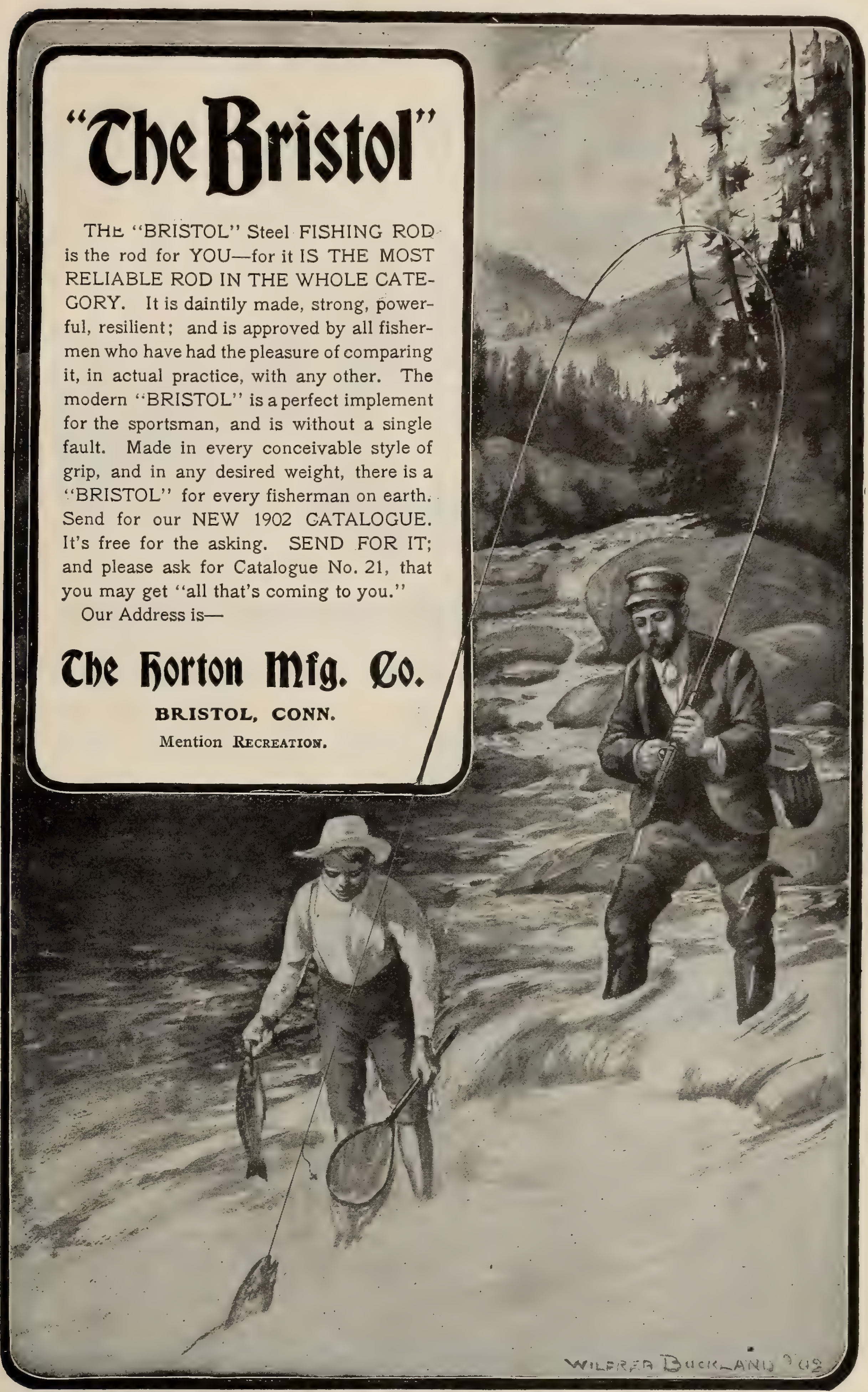
THE "BRISTOL" Steel FISHING ROD is the rod for YOU—for it IS THE MOST RELIABLE ROD IN THE WHOLE CATEGORY. It is daintily made, strong, powerful, resilient; and is approved by all fishermen who have had the pleasure of comparing it, in actual practice, with any other. The modern "BRISTOL" is a perfect implement for the sportsman, and is without a single fault. Made in every conceivable style of grip, and in any desired weight, there is a "BRISTOL" for every fisherman on earth. Send for our NEW 1902 CATALOGUE. It's free for the asking. SEND FOR IT; and please ask for Catalogue No. 21, that you may get "all that's coming to you."

Our Address is—

The Horton Mfg. Co.

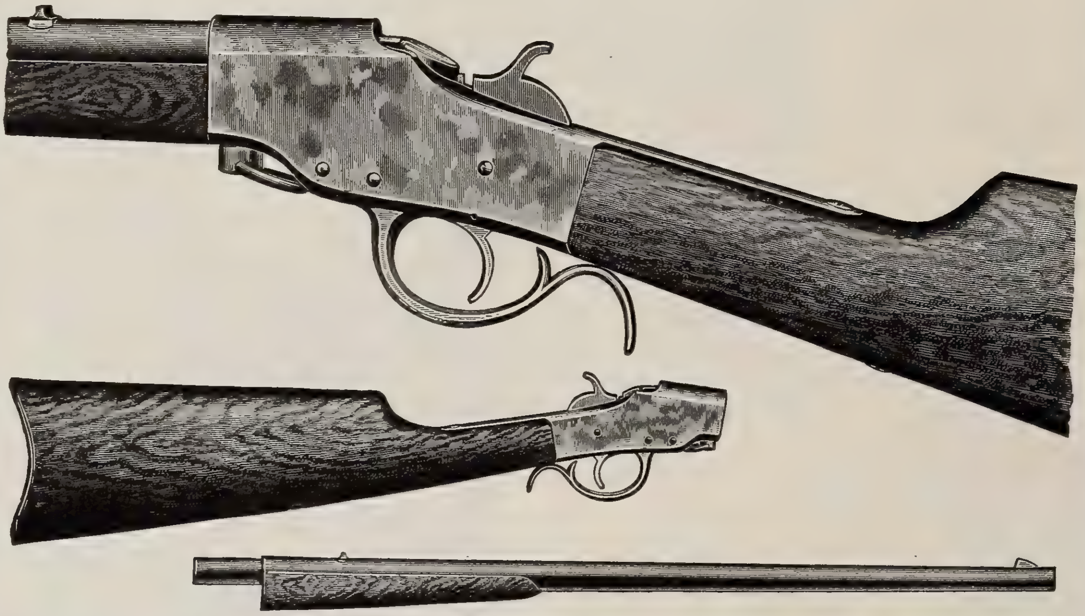
BRISTOL, CONN.

Mention Recreation.

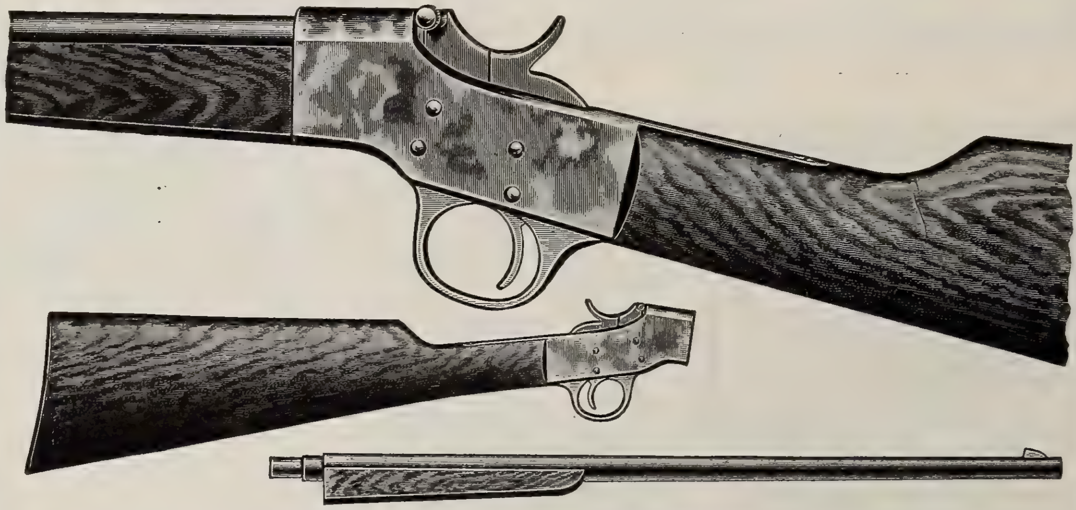


"HOPKINS & ALLEN"

New Line Small Calibre Rifles



No. 822.—Lever Action, case hardened, walnut stock, rubber butt plate, weight 4 pounds, 20-inch barrel, for 22 R. F. long or short cartridges. **$4.50**



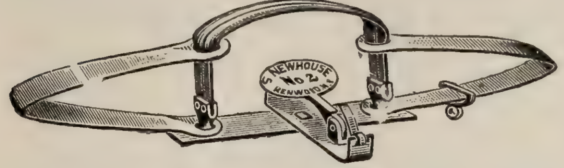
No. 722.—Solid Breech Block Action, case hardened, walnut stock, rubber butt plate, weight 3½ pounds, 18-inch barrel, for 22 short R. F. cartridges, **$3.50**

We will ship, all charges prepaid, on receipt of remittance with order, to any express office in the U. S. A. We agree to refund your money if you are not satisfied, provided you will agree to mail us a target made with the rifle we send you. Order while this offer is open.

The Hopkins & Allen Arms Co.

NORWICH, CONN., U. S. A.

Newhouse Traps



THE STANDARD FOR OVER FIFTY YEARS
Used by all professional hunters and trappers, who find that

The Best Trap is the Cheapest
Complete illustrated catalogue on application.

ONEIDA COMMUNITY, LTD., Kenwood, N. Y.

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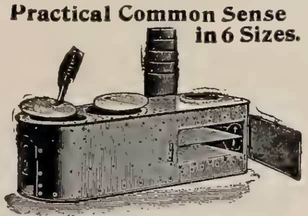

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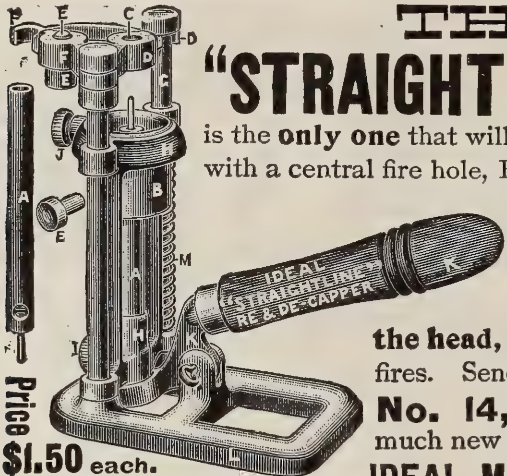

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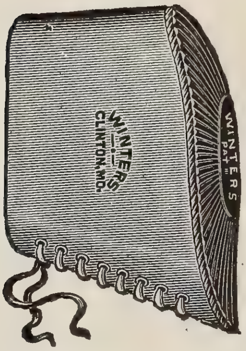
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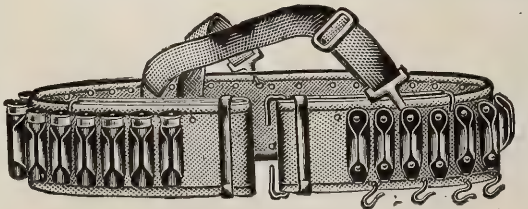

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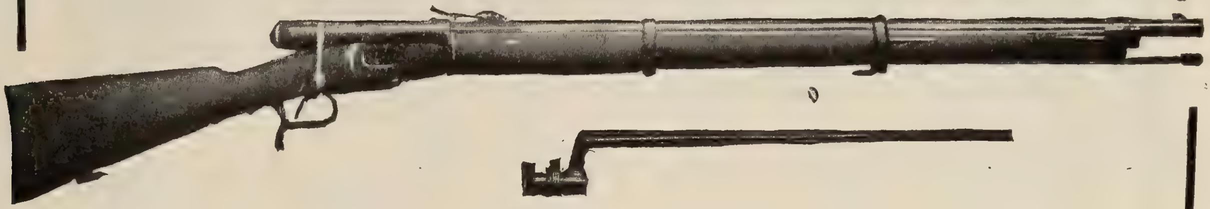

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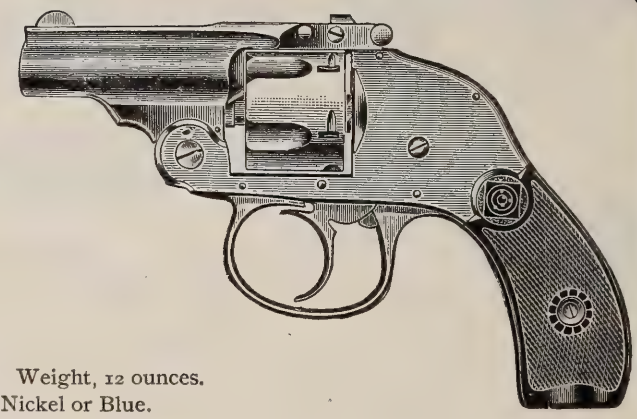

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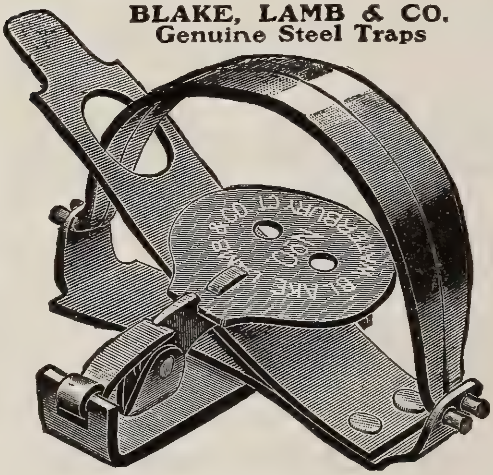

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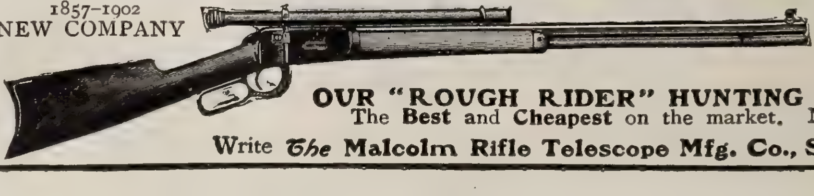

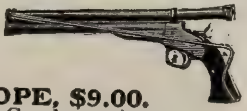

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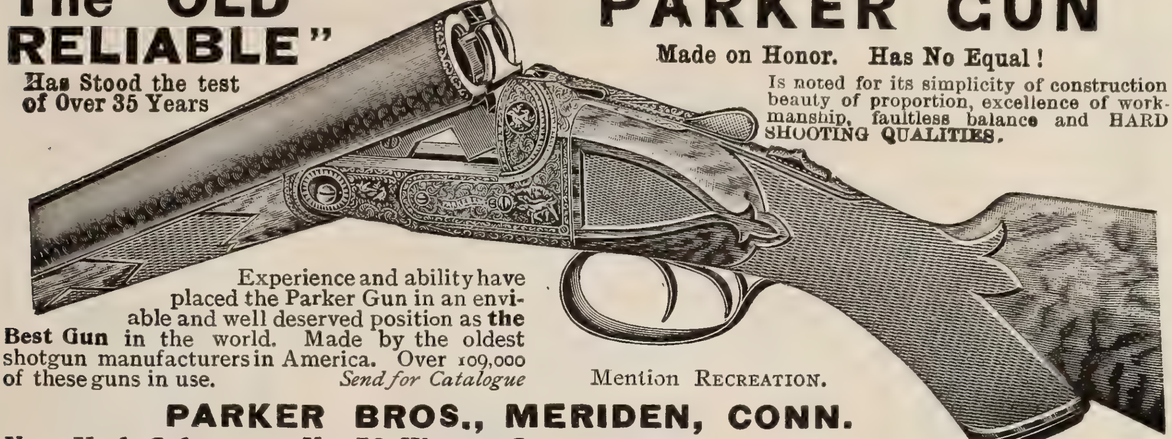

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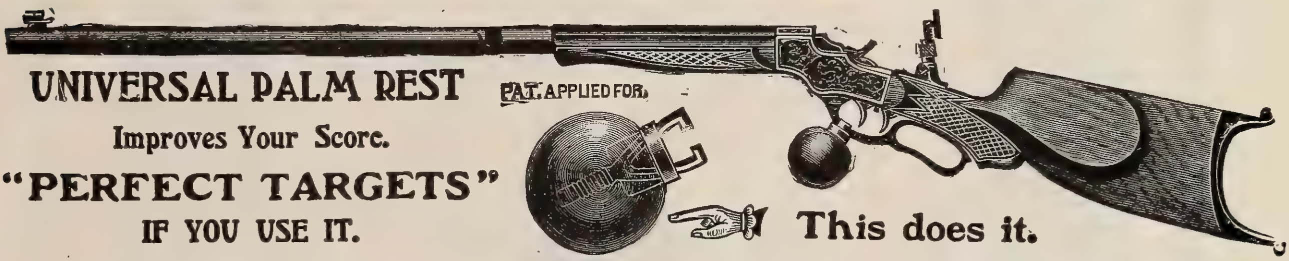

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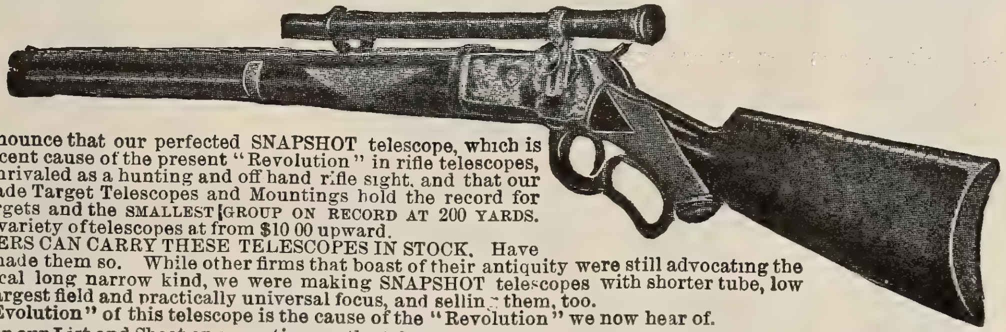

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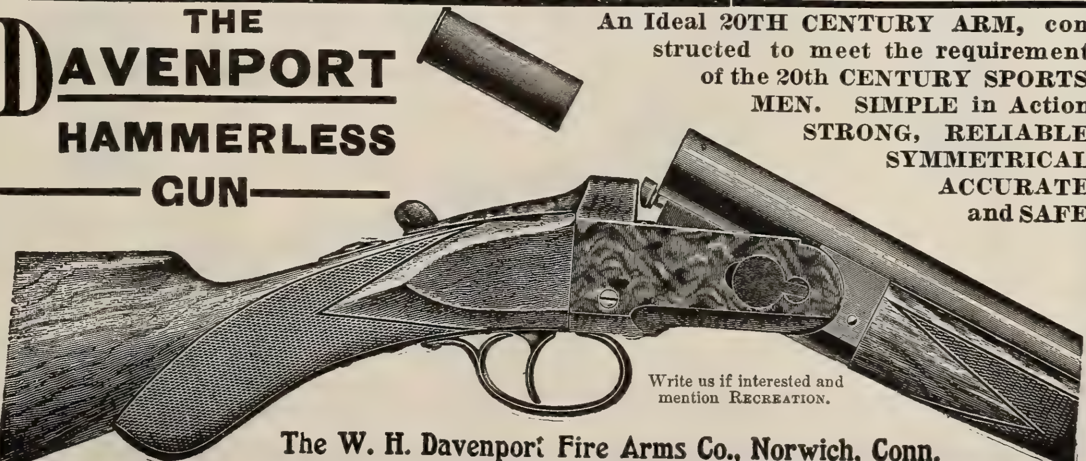

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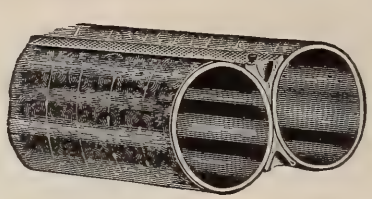

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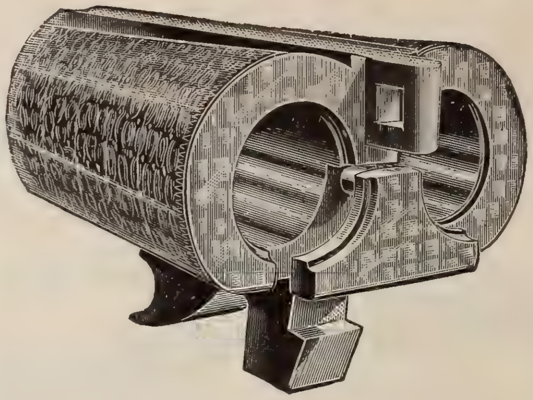

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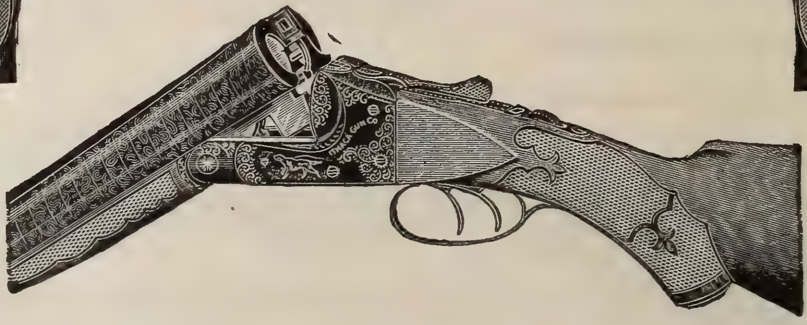

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